

JUNE 1957

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CONSTRUCTION REVIEW

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Featured in this issue . . .

FHA-VA SERIES AND THE HOUSING MARKET

REVISED ESTIMATES OF RESIDENTIAL ADDITIONS AND ALTERATIONS

- *Expenditures*
- *Starts*
- *Materials*
- *Awards*
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CONSTRUCTION REVIEW

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* This issue includes revised data for the statistical series in Part A (construction put in place), and for the public contract awards series in Part D (contracts).

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At a Glance

CONSTRUCTION ACTIVITY IN MAY--Outlays for new construction rose seasonally from April (by 11 percent) to a new May high of \$4 billion, and the record \$17.1 billion total for the first 5 months of 1957, was up 3 percent from the same 1956 period. For the first 5 months, the 1957 public total (\$4.8 billion) was 12 percent higher than in 1956--boosted chiefly by advances for highways, schools, and sewer and water facilities, plus increases for some types of Federal work such as conservation and development, industrial building (including atomic energy facilities), and armed services (Capehart) housing. Private outlays for the January-May period totaled about the same in both years, as declines in new housing and store building were virtually offset by important gains in all other major types of private nonfarm construction. (NOTE: These statistics reflect substantial revisions in the new construction estimates, and are the result of the annual reexamination of components of the series in the light of more recent source materials.)

HOUSING STARTS IN APRIL--Although nonfarm housing starts increased 11 percent from March to 92,000 in April, this total was down 17 percent from a year ago and was the smallest for any April since 1949. Private housing accounted for all the gain from March to April--rising 19 percent to 89,500 units. The seasonally adjusted annual rate of private starts increased over the month from 880,000 to 940,000, marking the first upturn in this rate since last October, but the fourth successive month that it was less than a million units. Comparing data for the first 4 months, this year's starts total (287,600 private and 15,400 public units) was 17 percent less than in the same 1956 period, and the lowest in 8 years.

FHA-VA ACTIVITY IN APRIL--Nonfarm housing begun under FHA and VA programs rose 13 percent from March to April, but volume continued well below a year earlier, and the FHA-VA share of total private starts fell from the 42-percent ratio of April 1956 to 29 percent this April. Almost all of the 19-percent over-the-year decline in total private starts, for the first 4 months, was in housing begun under FHA and VA programs. Indications are that starts under these programs are not likely to show strength in the next few months, as VA appraisal requests declined again in April and FHA applications rose only slightly. So far in 1957, applications for FHA insurance and VA appraisals totaled 38 percent less than in the like 1956 period.

NONFARM MORTGAGE RECORDINGS IN MARCH--The spring upturn in nonfarm mortgage recording activity began in March with an 11-percent increase to \$1.9 billion. The March figure was down 15 percent from a year ago, however, and the first-quarter total (\$5.6 billion) was 12 percent less--continuing into the 1957 first quarter the decline evident throughout 1956. The February to March advance reflected gains for all lending groups, with savings and loan associations (the major source of mortgage funds) contributing more than half the overall rise. All groups shared in the decrease from March 1956, and when totaled for the first quarter, over-the-year reductions among institutional lenders ranged from 6 percent for savings and loan associations to 25 percent for commercial banks. This year's first-quarter total was up slightly for individual lenders.

HOUSING VACANCY RATES, FIRST QUARTER 1957--In the first quarter of 1957, the housing vacancy rate was down slightly from the previous quarter and from the 1956 first quarter--reflecting decreases in rental vacancies in all four broad regions and in both metropolitan and nonmetropolitan places. Nationally, the overall vacancy rate has shown little change since the second quarter of 1955, when quarterly surveys began.

BUILDING PERMIT ACTIVITY IN APRIL--Building permit valuations rose 11 percent in April to \$1.7 billion, as increases occurred for all major kinds of new building except community structures (principally churches and schools), which declined moderately from March. The April total was down 9 percent from April 1956, however, and the 1957 total for the first 4 months was 8 percent less than in the same 1956 period--reflecting mainly the continued lower level of new homebuilding.

PUBLIC CONTRACT AWARDS IN MARCH--The value of public contract awards rose 44 percent in March to \$1.1 billion, bringing the total for the first quarter of 1957 to \$2.8 billion, or 19 percent more than for the same year-ago period. The rise from February to March was influenced by substantially increased awards for toll roads and other State highway projects, armed services (Capehart) housing, State and locally owned schools,

At a Glance

and Federal conservation and development work. Over the year, comparing data for the first quarter, expansion in public awards took place for almost all major types of work, with the most important gains reported for highways, schools, airfield construction, military housing, and Federal conservation and development.

CONSTRUCTION CONTRACTS IN APRIL AND MAY--The value of construction contracts for the first 4 months of 1956 and 1957, as reported by the F. W. Dodge Corp., was about the same in both years. Declines in residential and public works contracts offset most of the large gain shown by utilities. Nonresidential building contracts showed practically no change between the two 4-month periods.

Reports of the Engineering News-Record on the value of large construction contracts awarded during the 12 months ending in May show a continuation of the downtrend in 12-month totals evident since the beginning of the year. Declines in the private sector more than offset gains in publicly owned construction. A drop in building construction contract awards is in contrast to the increase shown for highways and bridges.

CONSTRUCTION COSTS IN APRIL--The Department of Commerce composite cost index continued in April to show the relative stability it has exhibited since mid-1956. Between July 1957 and this April, the index rose less than 2 percent, to 135 percent of the 1947-49 average.

BUILDING MATERIALS PRICES IN APRIL--The wholesale price index for building materials rose slightly from March to 130.7 (1947-49 100) in April, when counter price movements for some important commodities almost balanced one another. The index has shown little change since last fall, and in April it was below the level of a year earlier for the first time since mid-1954. The lumber price index, after a year-long downtrend, held steady from March to April, as small advances for most types of softwood were offset by declines for southern pine and hardwood lumber. Prices increased over the month for enameled iron plumbing fixtures, and rose to a new high for building hardware, concrete ingredients and products, portland cement, structural clay products, and asphalt roofing. Price reductions for copper and brass plumbing equipment, screening, linseed oil for paint, and floor linoleum were mainly due to lower costs of raw materials.

CONSTRUCTION MATERIALS OUTPUT IN MARCH--Output increased from February to March for most major construction materials, but all showed declines from March 1956. Over-the-year decreases ranged from 3 percent for iron and steel products and portland cement, to 41 percent for asphalt roofing products. Reflecting the lower levels of new housing activity, output of some important materials was the lowest for any March in several years--particularly asphalt roofing (the lowest in 8 years); and lumber; millwork; paint, varnish, and lacquer; heating and plumbing equipment; and clay construction products. On the other hand, items consumed largely in other types of construction (e.g., portland cement and iron and steel products) were only slightly below their March peaks of 1956. During the first quarter of 1957, output of both gypsum products and plumbing fixtures was down significantly from the same 1956 period--by 24 and 17 percent, respectively--also reflecting the lower level of residential construction.

CONTRACT CONSTRUCTION EMPLOYMENT IN APRIL--Employment in contract construction rose about seasonally from March to a new April high of 2,929,000--an increase of 76,000 over the April 1956 figure, according to preliminary estimates. This year's rate of gain over 1956 had narrowed, however, from 5 percent in the first quarter to about 3 percent in April. Information available through March shows that employment increases from the early months of 1956 occurred on all types of contract construction and in all four regions of the country.

HOURS AND EARNINGS IN MARCH--After expanding more than usual in February, the average workweek in contract construction contracted slightly in March (by 0.3 hour)--causing an 85-cent reduction in average weekly earnings, to \$104.03. Hourly earnings remained unchanged for the third successive month, at \$2.85. The overall decline in weekly hours occurred on both building and nonbuilding construction, which offset minor increases in some of the special trades (mainly painting and decorating). For the industry as a whole, the workweek this March was 1.5 hours longer than a year ago; hourly earnings averaged 15 cents more; and weekly pay was \$9.53 greater. These gains were shared by workers on all types of contract construction.

FHA and VA Housing Statistics and the Housing Market

MARVIN WILKERSON AND DOROTHY K. NEWMAN*

Several housing series compiled as administrative statistics by the Federal Housing Administration and the Veterans Administration are widely used as tools for assessing the current mortgage market situation and predicting the trend of future housing activity. This article briefly describes these series in their role as housing market indicators, and attempts to differentiate clearly among them and to discuss the various stages they represent in the mortgage lending procedure.

In the vanguard of the statistical series are summaries of the dwelling units represented by applications to the Federal Housing Administration for mortgage insurance and to the Veterans Administration for appraisals on new or proposed housing (FHA applications and VA appraisal requests). At later stages in the mortgage insuring and guarantee procedure are FHA commitments to insure; housing started under the inspection procedures of either agency (FHA and VA starts); and, finally, the units covered by the mortgages insured by FHA or guaranteed by the VA (loans closed).¹

The steps in the process, the elapsed time between them, the degree to which the FHA and VA procedures correspond, and any resulting effect on the completeness and comparability of the statistics are presented in the latter half of this article. Although the mortgage-assistance activities of both agencies extend to housing already built as well as to new and proposed construction, the series devoted to the latter chiefly are discussed here, since they provide the most direct clues to the new housing market situation.

FHA AND VA ASSISTED HOUSING IN THE HOUSING MARKET

The advance series of FHA applications together with VA appraisal requests provide a sensitive indicator of the trend in future homebuilding activity. As such they reflect both the current status of the housing market as well as the availability of mortgage funds. Applications plus appraisal requests usually precede actual start of construction under FHA or VA inspection by about 3 to 4 months, and loan closings by about 5 to 7 months (chart 1). They augur the trend of all private nonfarm housing started, which coincides closely with that of housing started under the Government-assisted programs. This may be seen very clearly from the 12-month moving totals in chart 2. While dwelling units begun with conventional financing (other than Government-assisted) moved within a relatively narrow range during the 1951-56 period,² all private nonfarm housing starts showed the general downswings and upswings of units started under the FHA-VA programs.

However, although dwelling units covered by FHA applications and VA appraisal requests furnish a good indication of the direction and general slope of private nonfarm housing starts a few months hence, they are less reliable as a measure of the level. This is chiefly because many units for which applications and appraisal requests are made are started, finally, under conventional financing; some

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¹ Statistics of the Federal Housing Administration and Veterans Administration appear regularly in the monthly bulletins *Housing Statistics*, published by the Housing and Home Finance Agency; *Loan Guaranty*, published by the Veterans Administration; and in *Construction Review*.

² This is the longest period for which comparable monthly data for all series are available. Relatively very few farm and publicly owned units are included in the FHA-VA series which, by and large, relate to private nonfarm housing. Dwelling units coming under the armed services (Capehart) housing program (Title VIII of the National Housing Act) are an exception. Units processed under this program appear in all FHA operating statistics since January 1956 except those on starts under FHA inspection (the military agencies make the inspections rather than FHA). However, because of their eventual public ownership (title reverts to the Department of Defense after amortization of the mortgage), dwelling units in Capehart projects are classified in the BLS housing starts estimates as public housing and, for comparability, have been deleted from the FHA statistics presented in this article. From January 1956 through April 1957, 16,500 dwelling units under the Capehart program have been included in the total of publicly owned new nonfarm housing started in continental United States.

do not eventuate in starts at all; and a fairly sizable proportion in recent years represent duplicate applications to the FHA and VA. (See table 2.) Attrition is greatest in a rising, and least in a declining housing market.

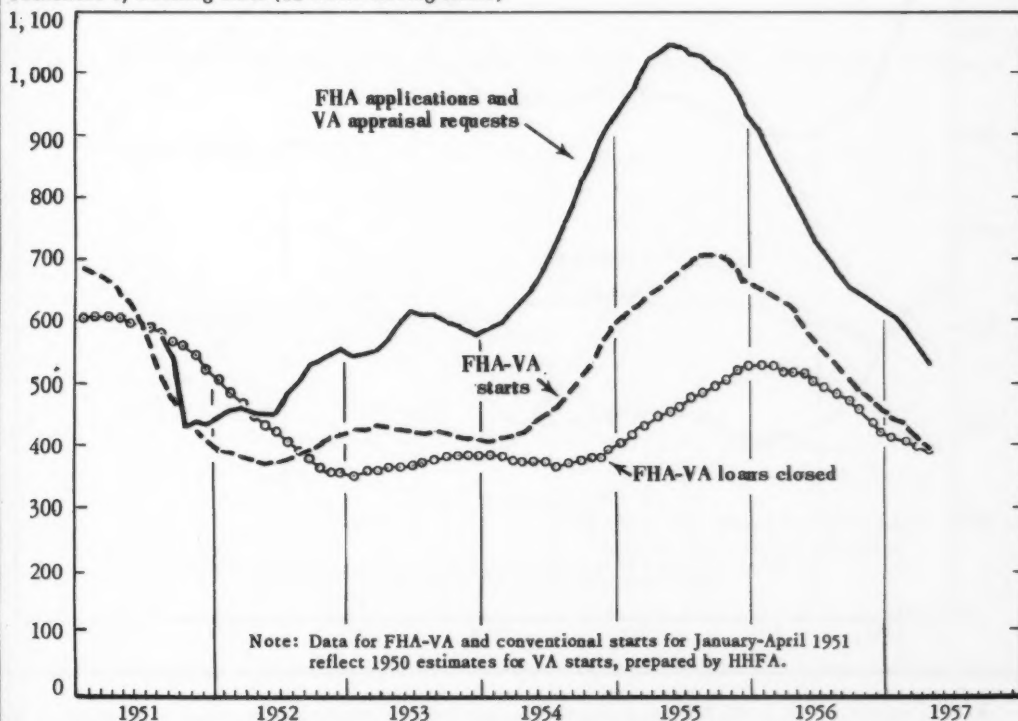
To some extent, this reflects the practice of builders and lenders under favorable market conditions to arrange for Government-assisted financing on a substantially larger share of the new housing they plan to start than at other times, and, correspondingly, at such times, to abandon the FHA and VA financing on a larger than usual proportion. The data show, in fact, that although the volume of housing started under FHA and VA inspection rises more than other housing during periods of peak home-building activity, and falls more at other times (see charts 2 and 3), the rise or decline is not commensurate with the earlier trend in applications for FHA insurance and VA appraisals (chart 1). The lower

Chart 1

New Dwelling Unit Volume at Three Stages in Processing FHA-Insured and VA-Guaranteed Mortgages

FHA Applications and VA Appraisal Requests, Starts, and Loans Closed

Thousands of dwelling units (12-month moving totals)

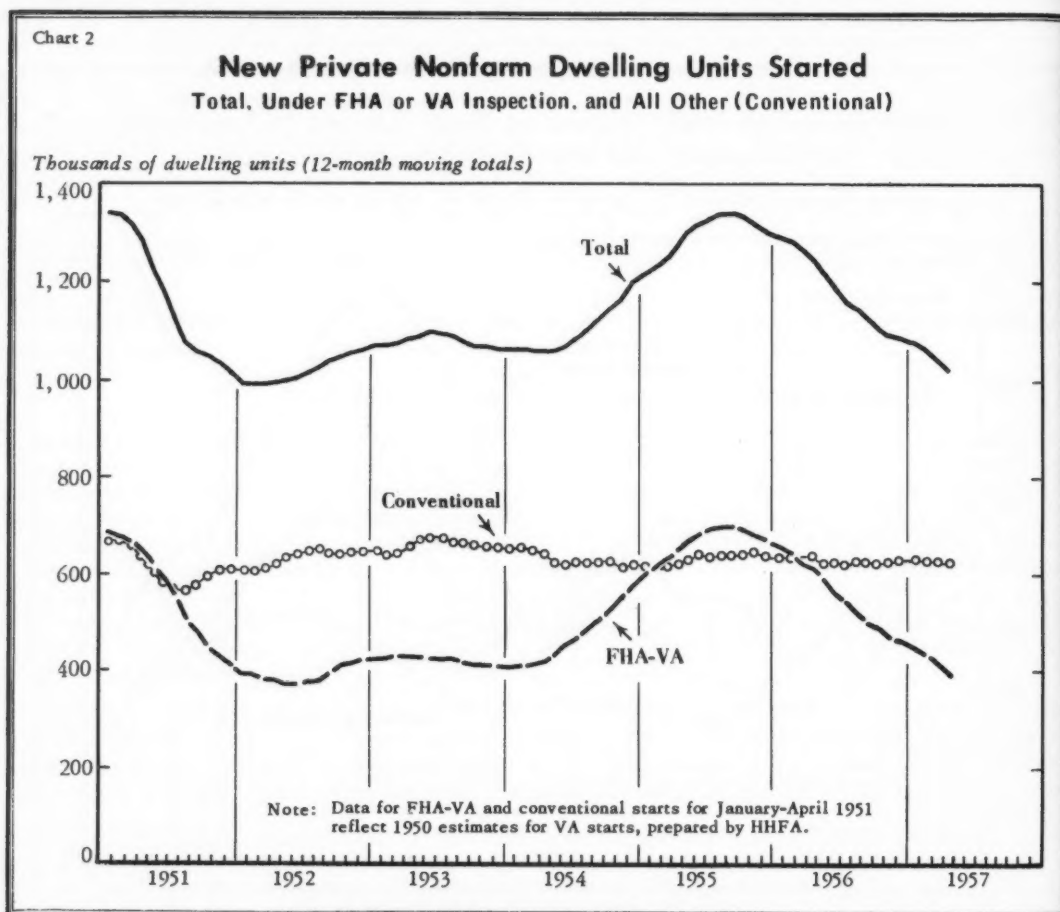


attrition rate in the declining phase of the market reflects partially also the use of FHA-VA financing commitments received in the active period, but held longer than usual.

Loans closed for new housing under the FHA and VA programs follow the same pattern with respect to starts under FHA-VA inspection, as the latter do in relation to applications. The curve for loans closed (chart 3) reflects that the attrition between starts and loans closed is greatest during periods of increasing housing volume, and least in periods of declining volume. However, the general

trend of loans closed follows, with less amplitude, the pattern for FHA-VA starts, and for all nonfarm housing starts, assuming a time lag for home completion, sale, and the conclusion of financing arrangements. The loans closed series also reveals the important influence in the declining phase, of the delayed use of FHA-VA financing arranged during periods of high activity.

Thus, the greatest volatility and the earliest and most notable response to mortgage credit conditions and the housing market situation are seen in the applications series (for FHA insurance and VA appraisals). The other major series (FHA-VA starts and loans closed) reflect the tenor of the housing market later, with much less amplitude to the swing, and with a moderated downtrend.



In fact, since 1952, FHA-VA units appear to represent a relatively constant proportion of all private nonfarm housing by the time the loans are closed,³ with only a slight tendency to rise after a period of easy credit and heavy applications (chart 3). The substantial rise in the ratio of FHA-VA loans closed to an estimate of all private loans closed in 1951-52 seems exceptional, and occurred, no doubt, because builders were holding a very large number of commitments for FHA-insured and VA-guaranteed loans on very easy terms. The latter had been obtained before stiff housing credit controls

³ No series on loans closed or mortgage recordings for new housing, exclusive of already existing dwelling units, is available. Crude estimates were derived by applying a 4-month lag to private nonfarm dwelling units started, based on an analysis of periodic Bureau of Labor Statistics studies of elapsed time in residential building.

were imposed in October 1950 (Regulation X). It is not surprising that with the extensive housing demand and strict credit conditions of the 1951-52 Korean period, that an extraordinarily large proportion of pre-Regulation X applications eventuated in starts and loans closed.

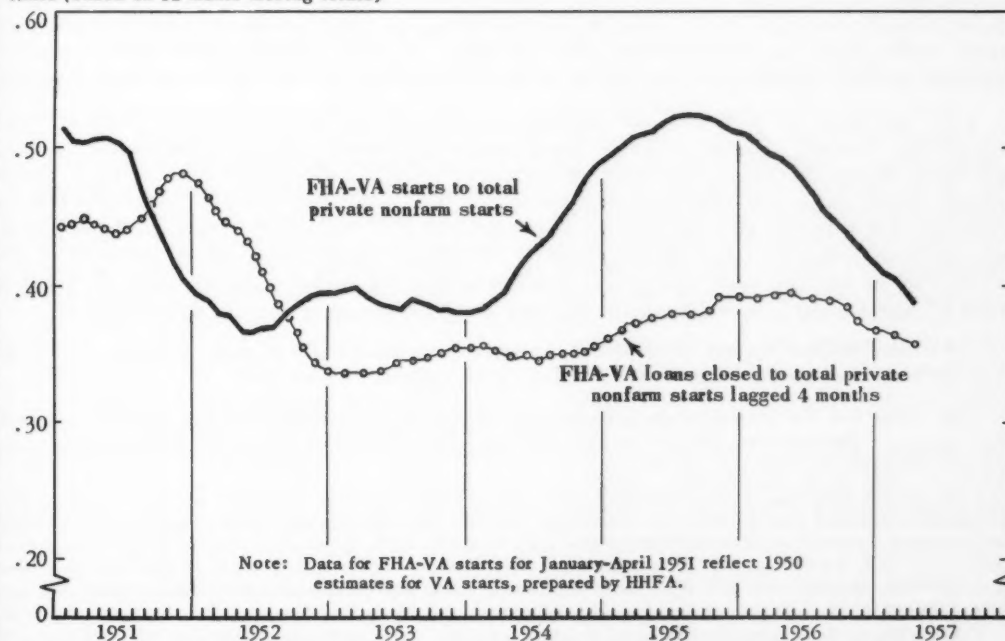
The terms applying to FHA-insured and VA-guaranteed home loans have been changed a number of times since 1953. These changes, however, have had much less effect on the FHA-VA series than has the supply of mortgage funds. For example, in April and early May 1953, the terms of FHA and VA home loans were liberalized, and the maximum interest rates were raised. A tight money situation was developing, however, and both FHA applications and VA appraisal requests dropped substantially. (See table 1.) They did not recover until 1954, when lenders with excess funds began actively seeking mortgage investments. By the spring of 1955, the mortgage money market began to tighten again, as demands for funds from other parts of the economy increased. Applications and appraisal requests promptly declined, well before the FHA and VA took action on July 30, 1955, to impose restrictions on mortgage credit terms for Government-assisted home loans. The Federal Home Loan Bank Board followed in September with action to discourage savings and loan associations from securing advances to make mortgage loans.

Partial reversal of these actions in December 1955 and in January 1956 did not stop the slide in applications and appraisal requests in FHA-VA starts, in total nonfarm housing starts, or in FHA and

Chart 3

Ratio of FHA-VA Activity to Total Private Nonfarm Housing Volume Starts and Loans Closed

Ratio (based on 12-month moving totals)



VA loans closed. All of these housing market indicators continued downward (with allowance for seasonal factors) through 1956. During this period, the maximum interest rates on Government-assisted mortgages became progressively less attractive in competition for scarce investment funds, since other forms of investment promised greater returns. A mild upturn in FHA applications and starts has followed an increase in the maximum interest rate on FHA loans on December 1, 1956. However, de-

spite this change in terms, and a further administrative action in March 1957 reducing downpayment requirements on FHA-insured housing, FHA activity so far this year has continued well below levels for the same month each year since 1950. Housing activity under the VA program (from appraisal requests to loans closed) has remained almost constant so far this year, at totals far below those for the same period of 1955-56.

COVERAGE OF THE FHA AND VA SERIES

New housing is defined by the Federal Housing Administration and the Veterans Administration as "new and proposed" construction and refers to units for which the request for Government-insured or guaranteed mortgages is made before construction is started, and on which inspections are made during construction. The FHA classifies as existing construction all previously occupied houses, and, in addition, previously unoccupied (new) houses for which the builder did not apply for FHA insurance before construction.⁴ Therefore, the volume of new housing is understated in the FHA series on new and proposed construction. The extent of this understatement could not be estimated accurately before 1956. In 1956, about one-fifth of the FHA units classified in existing construction were previously unoccupied.

Likewise, the VA appraisal requests series for new homes have excluded previously unoccupied units for which neither FHA nor VA compliance inspections have been made. In this series, as in the FHA series, such units have been classified as existing housing. However, beginning in July 1952, the only new houses without FHA or VA inspection for which a VA guaranty could be obtained had to be at least 1 year old after completion.⁵ Consequently, the understatement of new (previously unoccupied) houses in the VA new home series has been negligible since 1952. No estimate of the understatement in 1950-52 is available. All previously unoccupied houses granted a VA-guaranteed loan are classified as new at the time the loan is closed, so that there is no understatement of new housing in the VA loans closed series. This is unlike the FHA program, under which virtually all units maintain their classification as new or existing throughout the application and insuring period.

FHA statistics for both new and existing construction are subdivided also between "home" mortgages and "project" mortgages. In the classification for "home" mortgages--the largest category--single-family houses predominate, but some units in 2-to-4 family buildings are also included. Project mortgages relate primarily to rental housing and may include single-family houses for rent⁶ as well as apartments. For example, most military housing units with FHA-insured mortgages have been single-family rental units and are classified as "project" housing. The governing consideration in the FHA classification as between home and project housing is thus the market (sale or rental) for which the housing is intended rather than the type of structure (1-family houses or multifamily buildings).

One-family houses account for most of the activity under the VA program, and the VA housing data are presented under the single classification "home loans."

Both FHA and VA statistics include housing in territories and possessions outside continental United States. The relative volume of such off-continent activity is not large enough, however, to

⁴ On houses less than a year old which were not approved for FHA insurance prior to construction, the legal maximum ratios of loan to value are lower than for other such houses with FHA-insured loans. The lower ratio represents a penalty against the builder who fails to obtain FHA approval of plans and specifications and to arrange for FHA inspections of his houses during construction. When such a house is sold more than a year after completion, however, the full FHA ratio is allowed, since any defects in construction would presumably become apparent in the first year of the house's existence.

⁵ According to Sec. 504(b) Servicemen's Readjustment Act, as amended by Public Law 550, 82d Congress, effective July 16, 1952. Administrative exceptions are made in extremely remote areas where inspections are not feasible.

⁶ The term "project;" as used by FHA, refers to a group of units under a single mortgage. It does not generally include large tracts of single-family houses built for sale, which are classified as home mortgages. However, some cooperative housing projects consisting of single-family houses which, on completion, are intended for individual ownership are tabulated as "proposed projects." After completion, the individual units are released from the blanket mortgage and generally are reinsured under the FHA home mortgage program as existing homes.

influence comparisons with estimates of all private nonfarm housing started, which cover housing started only in continental United States.

Sequence of Processing Operations

In terms of equivalent steps in processing operations and the sequence of their occurrence, the principal series issued by the two agencies can be paired as follows (in all instances they provide a count of dwelling units):

FHA applications for mortgage insurance	VA appraisal requests
FHA commitments issued ⁷	
Housing starts under FHA inspection	Housing starts under VA inspection
FHA mortgages insured	VA loans guaranteed

The following outline summarizes the processing operations which are basic to these statistical series:

FHA

(1) *Applications for mortgage insurance.* Submitted by lending institutions only. Separate series for new and existing construction.

(2) *Commitments issued.* After property evaluation, FHA issues to lending institution a commitment to insure mortgage to an approved purchaser or mortgagor, contingent upon compliance with FHA construction standards, if new units. Separate series for new and existing construction.

(3) *Housing starts under FHA inspection.* Based on reports of first compliance inspection. FHA inspects all new units being processed for FHA mortgage insurance including those for which VA-guaranteed loans also have been requested.

(4) *Mortgages insured.* After final compliance inspection, FHA fulfills previous commitment to insure mortgage to approved buyer or mortgagor. Separate series for new and existing construction.

VA

(1) *Appraisal requests.* Submitted by builder, individual veteran, or lending institution. Separate series for new and existing construction.

After appraisal, VA issues to applicant for appraisal a certificate stating value which will be basis for loan guaranty. No published statistical series on issuance of Certificate of Reasonable Value (CRV).

(2) *Housing starts under VA inspection.* Based on reports of first compliance inspection. Includes units inspected by VA, but excludes units for which both FHA and VA mortgage assistance have been requested. The latter receive FHA inspection.

(3) *Loans guaranteed.* After final compliance inspection and receipt of notice of loan disbursement from lending institution, VA issues "evidence of guarantee" to lender. Separate series for new and existing construction.

VA also publishes statistical series on two optional intermediate steps prior to loan guarantee--Applications for home loans and Loans approved (i.e., "Certificate of commitment to guarantee").

FHA Applications and Commitments and VA Appraisal Requests

The initial step in the FHA procedures is for a lending institution--rather than the owner or builder--to apply to an FHA field office for mortgage insurance. Since most lending institutions are familiar with FHA procedures and regulations, considerable screening usually has been done before the applications are submitted to FHA, and permanent financing is at least tentatively arranged. The application is assigned to the FHA underwriting staff for property evaluation.

⁷ There is no published VA series comparable to FHA commitments issued, but the equivalent VA processing operation is the issuance of a Certificate of Reasonable Value.

CONSTRUCTION REVIEW

TABLE 1.—PRIVATE NONFARM HOUSING: SELECTED FHA AND VA SERIES,
AND TOTAL DWELLING UNITS STARTED, 1950-57

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual total ¹
NUMBER (in thousands) OF NEW DWELLING UNITS IN—													
Applications for FHA mortgage insurance²													
1950.....	92.2	77.6	65.7	48.4	80.2	43.7	45.7	42.1	27.9	57.2	18.3	26.1	625.3
1951.....	24.1	15.7	28.3	30.5	31.0	26.7	11.9	14.1	14.3	22.3	25.6	22.7	267.1
1952.....	28.7	23.2	27.0	29.5	22.1	24.7	29.5	27.2	26.7	27.7	32.0	25.3	323.8
1953.....	24.4	27.6	38.4	40.0	39.4	31.2	20.7	23.9	18.0	22.0	20.3	21.5	327.3
1954.....	24.3	25.7	37.3	38.9	34.7	40.5	31.3	32.3	34.9	30.1	28.7	24.6	383.3
1955.....	26.1	28.5	36.6	33.4	31.1	32.5	25.0	27.3	23.8	19.8	16.9	13.7	314.9
1956.....	16.2	20.2	25.4	23.8	24.3	18.0	17.6	18.5	13.9	17.1	13.5	10.9	219.4
1957.....	13.1	14.0	20.1	20.4									
Requests for VA appraisals													
1950.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	⁴ 29.0	⁴ 91.9	15.2	17.1	(3)
1951.....	15.7	12.1	17.6	20.9	12.7	12.0	7.7	9.4	11.3	16.6	13.9	14.5	164.4
1952.....	21.6	20.2	23.4	17.0	14.7	16.8	19.3	18.2	18.9	19.9	18.8	17.5	226.3
1953.....	13.8	20.9	20.7	22.0	25.3	27.2	20.8	22.1	17.8	19.3	22.6	19.0	251.4
1954.....	20.1	34.4	36.5	42.9	52.2	52.7	52.3	55.4	51.3	45.6	47.7	44.3	535.4
1955.....	46.2	64.2	71.9	65.9	69.3	52.4	51.4	56.0	45.1	43.1	30.4	24.9	620.8
1956.....	29.3	37.1	37.5	45.8	44.4	35.6	34.6	36.5	30.0	29.7	21.9	19.0	401.5
1957.....	18.9	20.2	19.5	19.4									
Starts under FHA inspection													
1950.....	28.4	26.4	37.5	38.1	49.1	50.2	49.7	61.6	42.4	40.3	32.4	30.6	486.7
1951.....	25.2	18.0	23.9	24.2	32.4	24.3	22.3	20.7	20.4	20.0	18.0	14.1	263.5
1952.....	15.8	17.4	19.4	26.4	25.7	25.9	29.1	24.6	27.6	27.6	21.2	19.2	279.9
1953.....	17.6	17.3	22.4	23.3	21.7	24.2	23.6	23.5	21.8	21.7	19.6	15.3	252.0
1954.....	13.2	16.3	20.5	23.8	24.0	27.7	25.4	27.0	25.9	24.7	26.3	21.5	276.3
1955.....	20.0	17.2	23.8	25.8	28.0	32.1	26.0	26.9	24.7	18.6	17.5	16.2	276.7
1956.....	13.0	13.1	16.9	19.8	19.7	18.4	17.6	18.6	15.1	15.5	12.1	9.6	189.4
1957.....	7.7	9.3	11.3	12.1									
Starts under VA inspection													
1950.....	(3)	(3)	(3)	(3)	(3)	18.8	18.6	22.9	17.6	18.7	16.1	12.1	(3)
1951.....	16.4	11.6	14.4	14.8	14.7	12.8	11.7	11.5	10.2	12.3	9.3	9.0	148.7
1952.....	7.5	8.6	9.1	11.8	11.6	13.3	13.1	12.7	14.0	16.2	13.5	9.9	141.3
1953.....	9.3	10.5	10.1	13.0	12.2	14.4	14.8	17.6	14.3	14.7	13.5	12.2	156.6
1954.....	11.6	14.2	15.9	19.8	25.0	27.9	26.8	33.3	33.9	33.5	36.0	29.1	307.0
1955.....	26.1	28.0	29.8	34.5	37.8	39.5	37.4	40.8	34.4	34.8	28.1	21.6	392.9
1956.....	23.0	17.4	20.6	26.4	26.6	26.4	25.2	24.4	24.0	24.0	17.8	15.0	270.7
1957.....	12.0	9.9	11.4	13.5									
FHA mortgages insured²													
1950.....	27.3	29.9	33.1	34.0	32.6	30.7	32.0	35.1	32.4	29.0	30.2	31.7	378.7
1951.....	27.2	21.9	24.8	20.2	20.5	17.9	17.7	18.7	17.3	21.1	14.8	12.9	235.0
1952.....	14.0	10.5	10.1	13.8	13.5	12.0	14.2	14.4	13.5	16.3	14.2	16.2	162.6
1953.....	15.4	14.6	15.3	16.2	14.9	13.1	17.6	15.4	14.0	15.9	15.5	15.0	182.5
1954.....	14.9	12.3	13.0	11.6	11.9	12.9	10.6	13.6	13.5	10.7	11.6	13.5	150.1
1955.....	12.5	11.3	13.0	10.7	9.9	11.5	9.6	11.8	12.7	11.4	12.8	12.6	139.8
1956.....	12.9	11.5	10.5	8.7	8.3	8.5	8.0	9.6	7.8	9.6	8.1	7.3	110.9
1957.....	8.0	7.3	7.6	7.1									
VA mortgages guaranteed													
1950.....	11.4	13.5	13.6	14.3	14.3	14.4	16.2	18.9	18.6	22.9	25.2	25.7	209.0
1951.....	27.2	24.9	22.8	23.1	22.8	20.1	26.4	27.2	23.0	24.2	23.7	21.1	286.5
1952.....	23.4	18.0	17.3	16.7	13.6	13.4	13.3	14.2	14.9	14.9	16.4	16.0	192.2
1953.....	16.8	19.2	15.6	16.0	15.0	16.2	15.7	16.1	19.3	18.4	18.5	16.2	202.9
1954.....	16.4	17.5	14.9	15.1	15.8	18.3	16.2	22.7	22.6	27.2	27.0	29.5	243.1
1955.....	34.0	30.9	30.1	27.6	28.9	29.4	28.2	32.5	31.8	38.4	41.8	34.0	387.6
1956.....	32.9	30.3	27.0	26.8	24.8	21.6	23.3	25.5	25.4	26.0	24.7	25.0	313.5
1957.....	30.3	24.4	21.8	20.6									

See footnotes at end of table.

CONSTRUCTION REVIEW

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TABLE 1.—PRIVATE NONFARM HOUSING: SELECTED FHA AND VA SERIES,
AND TOTAL DWELLING UNITS STARTED, 1950-57—CONTINUED

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual total
NUMBER (in thousands) OF PRIVATE NONFARM DWELLING UNITS STARTED													
1950.....	77.8	82.3	116.0	131.3	145.7	143.4	139.7	137.8	116.1	100.8	82.7	78.6	1,352.2
1951.....	82.2	76.5	90.2	92.3	97.6	90.3	86.8	88.3	95.3	88.9	72.2	59.5	1,020.1
1952.....	61.4	74.3	91.1	97.0	101.0	96.9	101.1	97.4	99.2	99.2	82.3	67.6	1,068.5
1953.....	68.2	73.8	96.1	107.4	105.6	102.0	96.4	92.2	92.1	90.1	79.9	64.5	1,068.3
1954.....	65.1	73.9	93.2	106.4	107.4	112.6	112.9	113.0	113.4	110.5	103.3	89.9	1,201.7
1955.....	87.3	87.9	112.8	130.5	135.1	131.4	121.9	122.3	113.6	104.8	88.4	73.5	1,309.5
1956.....	73.7	77.0	93.9	109.9	110.8	104.6	99.0	103.2	90.7	91.2	77.0	62.9	1,093.9
1957.....	60.1	62.5	75.5	89.5									

Source: Private nonfarm dwelling units started, U. S. Department of Labor; other data from the Housing and Home Finance Agency and the Veterans Administration.

¹ Components may not add to totals because of rounding.

² For comparability, dwelling units coming under the armed services (Capehart) housing program, which are included in FHA operating statistics from January 1956, are excluded in this table because of their eventual public ownership. See also text footnote 2, page 4.

³ Not available.

⁴ Estimated by the Housing and Home Finance Agency.

If the property satisfies FHA requirements, a commitment to insure the mortgage is issued to the lending institution submitting the application. Commitments are of two kinds: firm and conditional. A firm commitment, which is issued primarily when the prospective mortgagors are known, carries a more comprehensive obligation to insure than a conditional commitment which is contingent on the builder satisfying all FHA requirements and on his finding an acceptable buyer as well. At present, a firm commitment to insure a new house is good for 8 months, and for an existing house, 4 months. Conditional commitment terms are 12 and 6 months, respectively, for new and existing homes.

Because of the advance screening, only about 7 to 10 percent of the applications submitted to FHA by lending institutions fail to receive a commitment.⁸ The elapsed time between the receipt of an application and the issuance of a commitment depends on the workload of the individual FHA field office. Barring unusual backlogs, a normal period is about 3 to 4 weeks for new housing and 2 to 3 weeks for existing homes.

The appraisal request represents the first step in VA processing, analogous to the filing of an FHA application. Unlike the latter, however, the request for an appraisal may be filed by the builder, the owner, an individual veteran, or a lending institution. The appraisal request, as the term implies, is simply a request that the VA appraise the proposed or existing property. The permanent financing is not necessarily arranged when the appraisal request is made, although in actual practice it frequently is.

The appraisal requests are assigned within a few days to approved private appraisers who work on a fee basis. After the appraiser reports the results of his investigation, the VA issues a Certificate of Reasonable Value (CRV) to the applicant. The amount specified on the certificate becomes, in effect, the price ceiling for the property if it is sold with a VA-guaranteed mortgage. The CRV is valid for 8 months for proposed construction and 60 days for existing houses, and is renewable subject to reexamination of the appraised value.

The elapsed time between the appraisal assignment and the issuance of the CRV varies widely, depending on the volume of work in process. During periods of peak activity—for example, in late 1954 and early 1955 when sizable backlogs developed—the average elapsed time in some VA offices was as long as 60 days. Normally, the average time required is about 30 days for proposed housing in large tracts and approximately 15 days for individual proposed houses and for existing units.

⁸ An application may receive a preliminary rejection—for example, for insufficient information—and then be reopened and the processing completed. Such reopened cases are counted only once in the application series.

CONSTRUCTION REVIEW

Between the appraisal request and the issuance of the CRV there is a small--although unmeasured--attrition, which occurs in several ways. For example, the VA may decide that market conditions do not warrant construction of the full number of houses planned and may issue CRV's for only part of them. Similarly, a builder may withdraw his application before appraisal. Also, if the appraiser finds structural defects in an existing house or unsatisfactory features in proposed housing, the builder or seller may prefer to drop his plans for VA financing rather than make the changes necessary to obtain a CRV.

TABLE 2.—VOLUME OF PROPOSED DWELLING UNITS IN VA APPRAISAL REQUESTS AND FHA APPLICATIONS, AND PERCENT OF DUPLICATION, 1951-56

Year	Proposed dwelling units in--		
	VA appraisal requests and FHA applications	VA appraisal requests, ¹ to be started under FHA inspection	
		(DUPLICATION)	
		Number (in thousands)	Percent (col. 2 + col. 1)
	(1)	(2)	(3)
1951.....	431.4	37.5	8.7
1952.....	550.1	53.0	9.6
1953.....	578.8	62.6	10.8
1954.....	918.7	149.4	16.3
1955.....	935.7	168.2	18.0
1956.....	629.1	111.2	17.7

¹ Except for December 1956, based actually on appraisal assignments, which closely approximate appraisal requests both in number and in time of report or record. See page 11.

The FHA applications and VA appraisal requests overlap somewhat, since builders, in order to have a variety of financing plans available, may process their homes through both agencies. On an annual basis, the proportion of this overlap has ranged from 23 to 28 percent of the VA appraisal requests or from 9 to 18 percent of the volume of FHA applications and VA appraisal requests combined. (See table 2.)

Housing Starts

Both FHA and VA base their housing starts series⁹ on the first compliance inspection, which is made before the footings are poured in some cases, but normally after the foundations are completed. After the inspector's report is received in the FHA or VA field office, the unit is tabulated as started. Hence, there is some elapsed time between the beginning of excavation (the concept of a start for the Bureau of Labor Statistics series on all nonfarm housing) and the FHA-VA tabulation of the unit, but the overall difference appears to be minor. When units are being processed through both agencies, only the FHA normally makes the compliance inspections.¹⁰ Because of the similarities in concept of housing starts and the lack of overlapping in the FHA and VA starts data, the combined starts figures of the two agencies are frequently related to the BLS estimates of private housing starts to derive a measure of the proportion of total private homebuilding which has received some form of Government assistance. The residual, after deducting the Government-aided units, is used as a measure of the volume of conventionally financed new housing (including units without a mortgage).

The time lag between the issuance of an FHA commitment and the beginning of construction can not be measured accurately. However, from annual inventory reports submitted by its field offices, the FHA is able to approximate the lag by comparing the inventory of units "committed but not started" with the volume of starts in preceding months. In the past several years, the elapsed time between

⁹ The VA did not require compulsory inspections in the early years of its program and has no statistical base for a housing starts series before 1950. The FHA series is available from 1935.

¹⁰ In some cases, VA may also make a final inspection to check compliance with original plans and specifications upon which the CRV was based, but this does not result in any duplication in the FHA-VA starts series.

commitments and starts has ranged from about 2 to 3 months. This lag is an average only. For individual units, it may vary from a few days to the full duration of the commitment period with possible extensions. The combined lag from FHA application to commitment and from commitment to start thus averages between 3 and 4 months. Some small percentage of FHA commitments for new houses are never used and eventually expire. This does not necessarily mean the units were not built, but only that they were not started under FHA inspection.

The lag between the issuance of the Certificate of Reasonable Value and the date of a start under VA inspection cannot be accurately determined either, but it is estimated roughly to be about the same as the FHA lag from commitment issuance to start—approximately 3 months, on the average. This would represent a 3- to 4-month lag from appraisal request to start. There is also some attrition between the CRV issuance and the beginning of construction. This attrition cannot be measured statistically because of the division of inspection responsibilities, but it is probably somewhat greater than between the comparable FHA commitment and start.

Mortgages Insured and Loans Guaranteed

After a new unit has passed its final compliance inspection, it is ready for permanent financing. At this stage, many units drop out of the processing channels of both FHA and VA or shift between the two. A house processed for an FHA-insured mortgage, for example, may be sold with a conventional mortgage or for cash, or, if it is also eligible for a VA-loan guarantee, to a veteran with VA financing. Similarly, houses approved for VA-guaranteed loans may be conventionally financed, sold for cash, or sold with FHA financing, if eligible. Hence, there is normally a considerable drop from the number of units started under FHA and VA inspection to the number ultimately financed under the two programs.

After the final compliance inspection, the steps necessary in order to obtain FHA mortgage insurance depend on whether the FHA had issued a firm or conditional commitment for the mortgage. When a firm commitment has been issued, the mortgage insurance follows immediately after completion and final inspection of the house, since a credit investigation had already been made before the commitment was issued. For units built with conditional FHA commitments, the builder finds a prospective buyer, a credit investigation is made, and if this is satisfactory and other requirements have been met, primarily those governing minimum downpayment and the like, the FHA approves the loan and insures the subsequent mortgage. FHA mortgages on existing housing are handled in much the same way as those for new construction, except that the inspection stage is omitted.

The normal sequence of actions leading to a VA-guaranteed mortgage, after a qualified veteran purchaser is found, includes the following steps: First, the lending institution submits the veteran's application for a home loan accompanied by his certificate of eligibility and the Certificate of Reasonable Value. Next, the VA examines the application, checks the veteran's credit and compliance with other requirements, and if the loan is approved, issues a "certificate of commitment to guarantee" to the lending institution. Finally, the latter makes the loan and submits a notice of full disbursement to the VA which then issues an "evidence of guarantee" to the lender.¹¹

¹¹ This procedure can be telescoped. Any "supervised lender" (subject to State or Federal examination and supervision) is legally empowered to make home loans to qualified veterans without prior approval by the VA. These institutions can subsequently (within 30 days) submit loan reports and supporting documents, and the loan closing and guarantee are automatic if all laws and regulations have been complied with. Not all institutions use this privilege, however. In recent years, about nine-tenths of the mortgages on new houses for which VA-guaranteed loans were being sought, and about three-fourths of all the mortgages (on new and existing construction combined) have gone through the full cycle of obtaining prior VA approval of loans.

Revised Estimates of Residential Additions and Alterations, 1945-56

Technical Note

MARVIN WILKERSON*

A variety of surveys made in recent years have indicated that the U. S. Department of Labor's Bureau of Labor Statistics estimates of the dollar value of additions and alterations to private nonfarm housing have been much too low for the postwar period.¹ The estimates published with this note and in tables A-1 and A-2 of this issue of Construction Review reflect a substantial upward revision, following a thorough review of alternative sources of basic data and a detailed statistical analysis and adjustment of the materials which were finally used.

The value of additions and alterations to private nonfarm residential buildings is estimated separately from other new residential building, and is published as a distinct category in the series on the dollar value of new construction put in place (prepared jointly by the U. S. Departments of Labor and Commerce).² For all other types of construction, the value of additions and alterations is an integral part of the figure for new structures.

REVISED ESTIMATES OF PRIVATE NONFARM RESIDENTIAL ADDITIONS AND ALTERATIONS, 1945-57

(Millions of dollars)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual total
1945.....	21	19	21	27	34	37	51	53	57	63	67	66	516
1946.....	63	75	90	108	122	128	126	124	125	123	122	101	1,307
1947.....	94	96	109	139	160	176	192	203	205	213	205	168	1,960
1948.....	152	139	147	203	248	256	256	248	235	216	197	170	2,467
1949.....	144	131	141	179	203	216	216	205	208	203	192	162	2,200
1950.....	136	136	147	187	218	245	248	248	251	224	195	165	2,400
1951.....	147	160	162	192	216	234	243	245	248	243	224	176	2,490
1952.....	149	168	205	232	264	275	269	264	259	261	243	198	2,787
1953.....	168	171	197	251	280	293	299	293	275	269	251	208	2,955
1954.....	168	163	189	256	296	304	301	293	285	272	256	230	3,013
1955.....	189	181	211	283	355	355	339	317	317	309	285	235	3,376
1956.....	187	195	229	291	352	379	371	371	360	344	339	277	3,695
1957.....	214	217	258	326	373								

Additions and alterations to existing structures are defined as new construction, since they are conceived as additions to capital investment. They add materially to the value of a property, in contrast to maintenance and repair work, which maintains a property in good condition. Additions and alterations, for example, include the addition of a wing, a story or stories, or a garage, the initial installation of a furnace or an air conditioning system, or the finishing of a basement or attic. They are conceptually part of the final products of the economy, as measured by the gross national product (GNP). Maintenance and repair expenditures³ include painting, decorating, and repair or replacement of a furnace or other wornout equipment, and are defined as operating costs for purposes of the GNP.

* Of the Construction Statistics Division, Bureau of Labor Statistics, U. S. Department of Labor.

¹ Annual Survey of Consumer Finances, conducted by the Federal Reserve System in cooperation with the Survey Research Center of the University of Michigan; the 1947 Interindustry Relations Study of Bureau of Labor Statistics (see especially Input-Output Analysis, from the report New and Maintenance Construction, Report No. 2 of the 1947 Interindustry Relations Study, February 1953, by David I. Siskind); and the Bureau of the Census survey, Expenditures on Residential Owner-occupied Properties, January to May 1954, Series H-101, No. 1, December 18, 1954.

² See tables A-1 and A-2 in the Statistical Series section of Construction Review.

³ See Expenditures for Maintenance and Repairs in 1955 (in Construction Review, October 1956, p. 14), and Construction Volume and Costs, 1915-1954, a Statistical Supplement to Construction Review, pp. 10-12, and 67.

The estimates of expenditures for residential additions and alterations in the prewar and World War II years, which are based on such data as the BLS Family Expenditure Surveys of 1934-36 and 1941, appear reasonable through 1941 and most of the war years. Thus, only the postwar estimates, beginning with 1945, have been revised. The latter had been derived from the Bureau's regularly published series on the value of building permits issued for residential additions and alterations, adjusted for undercoverage.⁴

The revised estimates in the accompanying table were developed from a combination of three main sources, from which a benchmark estimate was prepared for 1950. The benchmark was moved using the trend in residential additions and alterations authorized by building permits. Because of the nature of the main sources of data used, the revised estimates were made in two parts: (1) expenditures by homeowners of 1-4 family properties and (2) expenditures by landlords on tenant-occupied structures. (It was assumed that tenants' outlays on their rented quarters were largely confined to maintenance and repairs.)

Expenditures by Homeowners

Expenditures by the owners of 1-4 family properties account for most of the total residential additions and alterations volume (over nine-tenths during the postwar period), and were derived from two sources: (1) The Survey of Consumer Expenditures in 1950, conducted by the Bureau of Labor Statistics as a basis for revising its Consumer Price Index; and (2) the Federal Reserve System's 1951 Survey of Consumer Finances. The former provided a precise classification of expenditures for additions and alterations, as against maintenance and repairs, but was only urban in coverage. In the latter, additions and alterations could not be clearly distinguished from maintenance and repairs, but all owner-occupied nonfarm structures were covered.⁵

The two studies were analyzed and compared in detail to determine likenesses and differences in coverage, definitions, and methodology. A division between additions and alterations and maintenance and repairs was developed for urban homeowners, according to the BLS study. The division was effected keeping in mind the criteria used in developing the series on the dollar value of new construction put in place, and the function of these data in the GNP.⁶

The results of the Federal Reserve Board study were used to adjust the BLS data to a nonfarm coverage. Then, the BLS ratio of expenditures for additions and alterations to homeowners' total expenditures on their properties, adjusted to a nonfarm coverage, was applied to the FRB estimates of nonfarm homeowners' total expenditures in 1950.

Expenditures by Landlords

The second part of the estimate--expenditures by landlords on tenant-occupied housing--covers 1-4 family structures not occupied by the owner, and all 5-or-more family structures. It represents

⁴ See Estimating Expenditures for New Construction (*in Techniques of Preparing Major BLS Statistical Series*, BLS Bull. 1168, Ch. 3, p. 21).

⁵ The 1954 Census survey of homeowner alterations and repairs (see footnote 3) was investigated as a source also, but it was not used directly because it was an experimental study based on a small sample; it covered only 5 months of 1954; and it included nonsegregable data which could not be incorporated in the nonfarm residential additions and alterations estimate, i.e., expenditures on farm housing and for equipment and appliances. The results, however, tend to confirm the general magnitude of the revised series.

⁶ Included in the additions and alterations were: The addition of floor area or living space by finishing basements and attics, enclosing porches, or construction of a new wing; conversion of space to provide an additional dwelling unit; new retaining walls, walks, driveways, and patios; general remodeling or modernization by installing an additional bathroom, enlarging a kitchen, etc.; additional landscaping (but not replacement of existing shrubbery, etc.); and initial installation of a furnace, hot water heater, electrical wiring, plumbing, air conditioning, etc. Appliances, such as refrigerators, stoves, and window air conditioners, were excluded. Among the inclusions, detached garages, outside masonry work, and landscaping were considered borderline cases. They were included, however, even though the expenditures do not pertain primarily to the house itself, because this type of activity represents capital improvements to the homeowner's property and is not covered elsewhere in the derivation of the GNP figures. Also, it was considered likely that where such items are furnished by the builder of new houses, the cost is included in the builder's estimate of construction cost and, hence, in the construction expenditure estimates for new dwelling units. Analogously, similar items should be included in the additions and alterations category.

such types of activity as the modernization of apartment buildings and the renovation of houses in rundown areas where rehabilitation is under way, as well as others of lesser proportions--addition of a garage or fence, or the installation of air conditioning. Such activities in combination are a small proportion of all expenditures for additions and alterations, but in the localities where they are most prevalent, mainly the large cities, they can be sizable. It is precisely in those places, however, that the building regulations are usually strictly observed and enforced.

Thus, an average expenditure per unit in 1950 was derived from building-permit data in a few areas, such as New York City, Chicago, and Washington, D. C., where such data were regarded as being particularly accurate. The average was then applied to the total inventory of tenant-occupied housing in 1950. Although the resulting estimate is less reliable than that for the owner-occupied segment, it makes up a relatively small part of the combined additions and alterations figure (6 percent). A large error in this area of estimate would have a negligible effect on the overall figure.

Moving the Benchmark

For purposes of comparison, two different methods were used to derive an annual postwar series from the 1950 benchmark of additions and alterations. One series was derived by applying the 1950 ratio of additions and alterations to all nonfarm homeowner expenditures, to the FRB estimates of owners' total expenditures on their homes in all years for which such data were available--1947-50 and 1952-55. That is, the percentage of all expenditures accounted for by additions and alterations was assumed to remain constant. The second series was derived by the use of the trend in the value of residential additions and alterations as authorized by building permits. Annual results obtained by the two methods were similar.

Since the FRB estimates are available only on an annual basis it would be necessary, in any event, to use the building-permit data to derive monthly additions and alterations figures. For this and the other reasons listed below, the building permit trend was selected to move the additions and alterations series:

(1) The building-permit series covers additions and alterations to tenant-occupied as well as owner-occupied units, whereas the FRB data are limited to owner-occupied homes; (2) the permit trend would reflect any increase in the relative importance of the renovation and urban renewal types of activity, both because it covers such housing, whereas the FRB data do not, and because permit coverage is especially adequate in cities, where such activity is concentrated; and (3) the permit data are likely to reflect any shift in the importance of additions and alterations as compared to maintenance and repairs outlays. The alternate technique holds the 1950 ratio between these two types of activity constant. A continuing comparison of the results of the two methods will be made, however, and any divergence in trend will be analyzed, and adjustments in methodology introduced, as indicated.

The revised series was prepared initially from 1947 to date. It was then necessary to link the new and the old series. As mentioned above, the original series appears adequate through 1941 and most of the war years, when all residential building was at an extremely low level. Building activity boomed during late 1945, and building costs increased rapidly in 1946. It appears likely that much of the discrepancy in level between the old and revised series accumulated during this period. The linking was therefore effected during these 2 years.⁷ The revised estimates from 1945 to date are shown in the accompanying table.

⁷For purposes of linking, a uniformly increasing rate of understatement in the old series during the 2-year period was assumed. That is, to obtain the revised 1945-46 data linking the old and new series, the original estimate for each month of 1945-46 was multiplied by a factor which was increased in each successive month by a uniform amount, so that the new level was reached by January 1947.

Estimates based on--

	FRB trend	BLS building-permit trend
	(Millions of dollars)	
1947.....	2,317	1,960
1948.....	2,607	2,467
1949.....	2,524	2,200
1950.....	2,400	2,400
1951.....	(1)	2,490
1952.....	2,731	2,787
1953.....	2,814	2,955
1954.....	2,938	3,013
1955.....	3,228	3,376

¹ Not available.

Part A--Construction Put in Place

NOTE: The statistics in Part A include revisions made annually upon reexamination of all components in the light of more recent source materials. Also, data are revised for a few components because of changed definitions.

In the private sector, warehouses built for commercial establishments for their own use (e.g., warehouses for department stores), formerly classified under "Miscellaneous nonresidential buildings," are now included in "Office buildings and warehouses." Data have been transferred, beginning with January 1955, from all contract awards covering this type project. Expenditures estimates for earlier periods are not entirely comparable, since similar re-classification could not be made for the basic contract awards data.

In the public sector, the "Conservation and development" category has been expanded to include State and locally owned: (1) river and harbor improvements other than marine terminal facilities (formerly classified under "Public service enterprises"); and (2) irrigation, drainage, flood control, and miscellaneous conservation and development work (formerly classified under "All other public"). Activity estimates for these categories are revised from January 1946. Data are not available for similar revisions in earlier periods, but adjustments probably would be negligible.

Indexes for seasonally adjusting construction activity estimates have been recomputed from 1947--taking into account all the latest revisions in components. Indexes which apply to the 1956 data are being used for seasonal adjustment of the 1957 estimates.

Estimates of nonfarm residential additions and alterations, beginning with January 1945 data, have been revised substantially upward. See Technical Note, page 14, this issue.

Revised estimates of new construction activity for periods not shown in this issue of Construction Review, and indexes for seasonally adjusting the data, will appear in a forthcoming supplement, Construction Volume and Costs--A Supplement to Construction Review.

Table A-1: New Construction Put in Place: Current Month, by Type of Construction

Type of construction	Value (in millions of dollars)								Percent change		
	1957					1956	First 5 months		May 1957 from--		First 5 months, 1956-57
	May	Apr.	Mar.	Feb.	Jan.	May	1957	1956	Apr. 1957	May 1956	
TOTAL NEW CONSTRUCTION	4,032	3,641	3,280	3,000	3,182	3,962	17,135	16,643	+11	+2	+3
PRIVATE CONSTRUCTION	2,803	2,579	2,392	2,217	2,311	2,839	12,302	12,331	+9	-1	(1)
Residential buildings (nonfarm)....	1,405	1,300	1,167	1,048	1,137	1,539	6,057	6,529	+8	-9	-7
New dwelling units	995	940	875	795	885	1,150	4,490	5,115	+6	-13	-12
Additions and alterations	373	326	258	217	214	352	1,388	1,254	+14	+6	+11
Nonhousekeeping	37	34	34	36	38	37	179	160	+9	0	+12
Nonresidential buildings.....	747	713	709	704	722	706	3,595	3,322	+5	+6	+8
Industrial.....	270	271	269	270	269	253	1,349	1,166	(1)	+7	+16
Commercial	287	263	264	257	269	295	1,340	1,392	+9	-3	-4
Office buildings and warehouses	146	135	133	135	143	131	692	617	+8	+11	+12
Stores, restaurants, and garages	141	128	131	122	126	164	648	775	+10	-14	-16
Other nonresidential buildings..	190	179	176	177	184	158	906	764	+6	+20	+19
Religious.....	68	64	63	65	67	56	327	275	+6	+21	+19
Educational.....	40	39	40	41	43	42	203	202	+3	-5	(1)
Hospital and institutional.....	40	38	36	34	33	24	181	124	+5	+67	+46
Social and recreational.....	24	23	23	23	24	21	117	93	+4	+14	+26
Miscellaneous.....	18	15	14	14	17	15	78	70	+20	+20	+11
Farm construction	140	119	105	96	91	143	551	576	+18	-2	-4
Public utilities.....	493	432	398	357	350	441	2,030	1,864	+14	+12	+9
Railroad.....	38	37	35	31	32	38	173	150	+3	0	+15
Telephone and telegraph.....	101	88	94	86	75	97	444	403	+15	+4	+10
Other public utilities.....	354	307	269	240	243	306	1,413	1,311	+15	+16	+8
All other private.....	18	15	13	12	11	10	69	40	+20	+80	+73
PUBLIC CONSTRUCTION	1,229	1,062	888	783	871	1,123	4,833	4,312	+16	+9	+12
Residential buildings	35	34	30	30	29	22	158	104	+3	+59	+52
Nonresidential buildings.....	387	374	345	305	336	334	1,747	1,526	+3	+16	+14
Industrial.....	43	41	41	37	44	32	206	161	+5	+34	+28
Educational.....	236	233	215	194	211	216	1,089	993	+1	+9	+10
Hospital and institutional.....	33	31	27	23	24	24	138	109	+6	+38	+27
Administrative and service.....	38	36	32	27	30	29	163	117	+6	+31	+39
Other nonresidential buildings..	37	33	30	24	27	33	151	146	+12	+12	+3
Military facilities.....	105	95	84	82	93	116	459	479	+11	-9	-4
Highways.....	455	335	230	195	225	427	1,440	1,301	+36	+7	+11
Sewer and water systems	117	113	104	93	100	109	527	462	+4	+7	+14
Sewer	64	63	58	53	56	60	294	255	+2	+7	+15
Water	53	50	46	40	44	49	233	207	+6	+8	+13
Public service enterprises.....	35	30	26	21	24	34	136	133	+17	+3	+2
Conservation and development.....	82	70	60	51	57	72	320	275	+17	+14	+16
All other public	13	11	9	6	7	9	46	32	+18	+44	+44

Source: Departments of Commerce and Labor.

¹ Change of less than one-half of 1 percent.

CONSTRUCTION REVIEW

Table A-2: New Construction Put in Place: Recent Monthly Trend, by Type of Construction

(Value, in millions of dollars)

Type of construction	1955												Year
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
TOTAL NEW CONSTRUCTION	2,962	2,833	3,121	3,480	3,843	4,119	4,249	4,335	4,291	4,155	3,821	3,372	44,581
PRIVATE CONSTRUCTION	2,201	2,127	2,337	2,557	2,785	2,984	3,059	3,084	3,067	2,998	2,838	2,583	32,620
Residential buildings (nonfarm) ..	1,240	1,162	1,317	1,496	1,652	1,767	1,802	1,785	1,759	1,702	1,597	1,426	18,705
New dwelling units.....	1,030	960	1,085	1,190	1,270	1,380	1,430	1,435	1,410	1,360	1,280	1,160	14,990
Additions and alterations.....	189	181	211	283	355	355	339	317	317	309	285	235	3,376
Nonhousekeeping.....	21	21	21	23	27	32	33	33	32	33	32	31	339
Nonresidential buildings.....	542	548	555	560	590	633	668	685	714	721	715	680	7,611
Industrial.....	186	187	186	184	183	190	199	205	213	219	224	223	2,399
Commercial*.....	188	200	215	226	252	279	296	304	322	326	318	292	3,218
Office buildings													
and warehouses*.....	84	85	89	96	105	110	114	117	121	126	133	131	1,311
Stores, restaurants,													
and garages.....	104	115	126	130	147	169	182	187	201	200	185	161	1,907
Other nonresidential buildings*.....	168	161	154	150	155	164	173	176	179	176	173	165	1,994
Religious.....	55	53	53	54	58	62	66	68	69	68	66	62	734
Educational.....	42	39	37	36	36	39	41	43	45	45	45	44	492
Hospital and institutional.....	28	28	28	28	30	30	31	31	31	30	29	27	351
Social and recreational.....	18	17	16	17	19	22	23	23	22	21	21	20	239
Miscellaneous*.....	25	24	20	15	12	11	12	11	12	12	12	12	178
Farm construction.....	102	106	115	128	148	160	169	172	159	132	111	98	1,600
Public utilities.....	303	298	336	359	379	408	404	428	423	432	404	369	4,543
Railroad.....	23	22	26	27	33	34	34	35	36	39	35	30	374
Telephone and telegraph.....	52	52	62	62	62	73	65	76	72	76	76	77	805
Other public utilities.....	228	224	248	270	284	301	305	317	315	317	293	262	3,364
All other private.....	14	13	14	14	16	16	16	14	12	11	11	10	161
PUBLIC CONSTRUCTION	761	706	784	923	1,058	1,135	1,190	1,251	1,224	1,157	983	789	11,961
Residential buildings.....	22	21	23	22	21	24	20	23	23	23	22	22	266
Nonresidential buildings.....	342	321	347	363	374	383	383	378	372	349	320	286	4,218
Industrial.....	90	77	76	74	71	68	61	51	45	40	38	30	721
Educational.....	182	178	190	202	211	217	220	223	221	212	200	186	2,442
Hospital and institutional.....	25	22	26	27	28	30	31	31	31	27	24	20	322
Administrative and service.....	21	20	26	28	31	31	33	34	33	28	24	22	331
Other nonresidential buildings.....	24	24	29	32	33	37	38	39	42	42	34	28	402
Military facilities.....	81	76	82	96	107	120	125	133	138	138	118	99	1,313
Highways.....	170	161	179	276	375	415	457	508	487	452	345	225	4,050
Sewer and water systems.....	76	70	81	88	96	99	104	105	100	97	89	80	1,085
Sewer.....	44	40	45	50	54	56	60	59	56	54	51	46	615
Water.....	32	30	36	38	42	43	44	46	44	43	38	34	470
Public service enterprises.....	12	9	13	14	16	20	25	28	29	25	23	19	233
Conservation and development.....	51	43	52	56	61	65	67	66	65	64	58	53	701
All other public.....	7	5	7	8	8	9	9	10	10	9	8	5	95
*Amount transferred from "Miscellaneous" to "Office buildings and warehouses"													
(See Note at beginning of Part A)													
--	2	7	11	17	20	19	18	20	20	22	21	177	

CONSTRUCTION REVIEW

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Table A-2: New Construction Put in Place: Recent Monthly Trend, by Type of Construction--Continued

(Value, in millions of dollars)

Type of construction	1956												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
TOTAL NEW CONSTRUCTION	3,028	2,918	3,179	3,556	3,962	4,288	4,420	4,474	4,425	4,302	3,964	3,544	46,060
PRIVATE CONSTRUCTION	2,276	2,210	2,400	2,606	2,839	3,030	3,107	3,122	3,073	3,003	2,922	2,654	33,242
Residential buildings (nonfarm) ..	1,197	1,120	1,259	1,414	1,539	1,654	1,674	1,672	1,640	1,580	1,521	1,362	17,632
New dwelling units.....	980	895	1,000	1,090	1,150	1,235	1,260	1,260	1,240	1,195	1,140	1,045	13,490
Additions and alterations	187	195	229	291	352	379	371	371	360	344	339	277	3,695
Nonhousekeeping.....	30	30	30	33	37	40	43	41	40	41	42	40	447
Nonresidential buildings	649	647	655	665	706	761	788	786	787	797	804	772	8,817
Industrial.....	223	225	226	239	253	264	271	277	278	278	276	274	3,084
Commercial*.....	270	272	279	276	295	324	332	316	313	320	329	305	3,631
Office buildings													
and warehouses*.....	124	121	119	122	131	140	146	147	152	160	165	157	1,684
Stores, restaurants,													
and garages	146	151	160	154	164	184	186	169	161	160	164	148	1,947
Other nonresidential buildings*.....	156	150	150	150	158	173	185	193	196	199	199	193	2,102
Religious.....	58	55	53	53	56	62	67	71	73	75	74	71	768
Educational.....	41	40	39	40	42	46	48	49	49	49	47	46	536
Hospital and institutional	26	25	25	24	24	25	26	28	30	31	32	32	328
Social and recreational	18	17	18	19	21	23	25	27	27	27	27	26	275
Miscellaneous*.....	13	13	15	14	15	17	19	18	17	17	19	18	195
Farm construction.....	97	101	111	124	143	156	165	169	156	130	111	97	1,560
Public utilities	325	335	368	395	441	448	468	483	478	484	475	413	5,113
Railroad.....	23	28	28	33	38	35	41	41	40	41	43	36	427
Telephone and telegraph	66	76	80	84	97	93	94	94	87	100	107	88	1,066
Other public utilities	236	231	260	278	306	320	333	348	351	343	325	289	3,620
All other private	8	7	7	8	10	11	12	12	12	12	11	10	120
PUBLIC CONSTRUCTION	752	708	779	950	1,123	1,258	1,313	1,352	1,352	1,299	1,042	890	12,818
Residential buildings	20	21	18	23	22	24	23	25	25	30	31	30	292
Nonresidential buildings	293	284	301	314	334	358	378	390	381	371	344	324	4,072
Industrial.....	36	33	31	29	32	38	38	43	41	42	45	45	453
Educational.....	190	187	195	205	216	221	231	236	231	226	210	201	2,549
Hospital and institutional	20	19	23	23	24	25	26	29	30	30	26	23	298
Administrative and service	20	19	23	26	29	32	35	39	39	38	33	29	362
Other nonresidential buildings.....	27	26	29	31	33	42	48	43	40	35	30	26	410
Military facilities	87	82	90	104	116	135	136	143	146	141	117	98	1,395
Highways	196	177	193	308	427	501	518	530	543	512	326	239	4,470
Sewer and water systems.....	82	77	92	102	109	115	122	125	121	120	110	100	1,275
Sewer.....	46	42	50	57	60	63	68	69	65	65	60	56	701
Water.....	36	35	42	45	49	52	54	56	56	55	50	44	574
Public service enterprises.....	21	19	27	32	34	37	41	40	39	35	32	27	384
Conservation and development	48	44	52	59	72	79	84	87	84	79	73	65	826
All other public	5	4	6	8	9	9	11	12	13	11	9	7	104
*Amount transferred from "Miscellaneous" to "Office buildings and warehouses"													
(See Note at beginning of Part A)													
	20	20	23	24	29	34	32	26	27	37	36	31	339

Source: Departments of Commerce and Labor.

COMPOSITION OF REGIONS AND GEOGRAPHIC DIVISIONS

NORTHEAST		NORTH CENTRAL		SOUTH		WEST	
1. New England	3. E. N. Central	4. W. N. Central	5. S. Atlantic	6. E. S. Central	8. Mountain		
Connecticut	Illinois	Iowa	Delaware	Alabama	Arizona		
Maine	Indiana	Kansas	Dist. of Col.	Kentucky	Colorado		
Massachusetts	Michigan	Minnesota	Florida	Mississippi	Idaho		
New Hampshire	Ohio	Missouri	Georgia	Tennessee	Montana		
Rhode Island	Wisconsin	Nebraska	Maryland		Nevada		
Vermont		North Dakota	N. Carolina	7. W. S. Central	New Mexico		
		South Dakota	S. Carolina	Arkansas	Utah		
2. Middle Atlantic			Virginia	Louisiana	Wyoming		
New Jersey			W. Virginia	Oklahoma			
New York				Texas			
Pennsylvania							
					9. Pacific		
					California		
					Oregon		
					Washington		
NONFARM POPULATION DISTRIBUTION IN 1950							
NORTHEAST—29.5 percent.		NORTH CENTRAL—29.0 percent.		SOUTH—27.7 percent.		WEST—13.8 percent.	

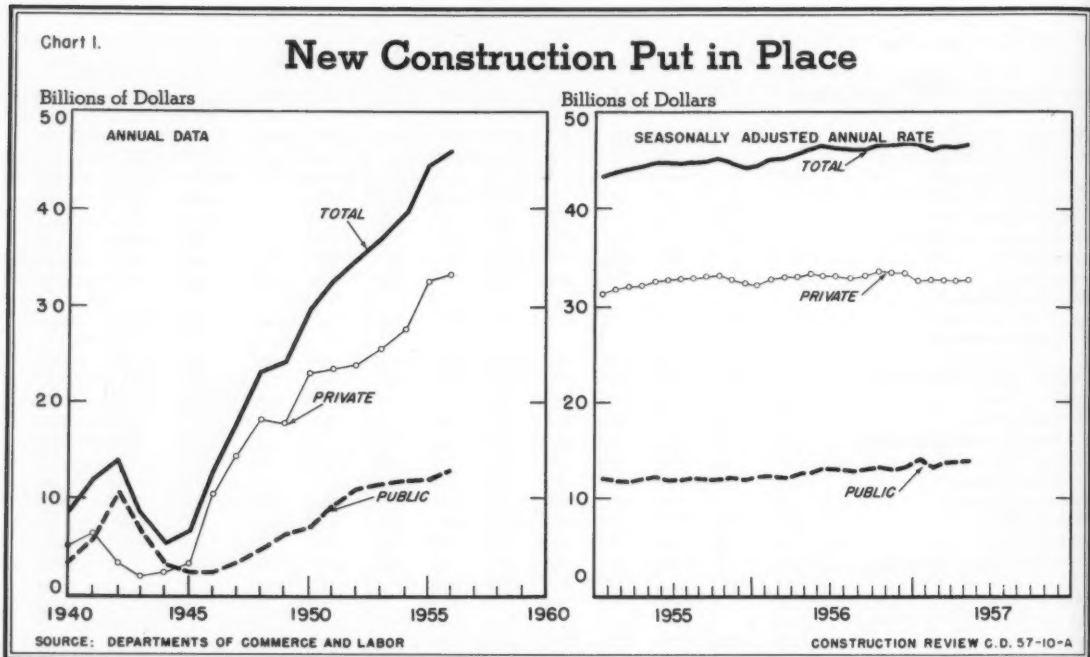


Table A-3: New Construction Put in Place: Seasonally Adjusted Annual Rate, by Type of Construction

(Value, in millions of dollars)

Type of construction	Seasonally adjusted annual rate						Annual total	
	1956	1957					1955	1956
	May	Jan.	Feb.	Mar.	Apr.	May		
TOTAL NEW CONSTRUCTION	46,188	46,848	46,212	46,740	46,656	46,920	44,581	46,060
PRIVATE CONSTRUCTION	33,420	32,652	32,736	32,844	32,712	32,940	32,620	33,242
Residential buildings (nonfarm)	17,628	16,932	16,764	16,656	16,320	15,960	18,705	17,632
Nonresidential buildings	8,880	8,988	8,976	9,156	9,252	9,396	7,611	8,817
Industrial	3,120	3,168	3,240	3,288	3,324	3,336	2,399	3,084
Commercial	3,744	3,504	3,396	3,504	3,540	3,648	3,218	3,631
Office buildings and warehouses	1,692	1,704	1,692	1,740	1,776	1,884	1,311	1,684
Stores, restaurants, and garages	2,052	1,800	1,704	1,764	1,764	1,764	1,907	1,947
Other nonresidential buildings	2,016	2,316	2,340	2,364	2,388	2,412	1,994	2,102
Farm construction	1,560	1,452	1,476	1,488	1,500	1,524	1,600	1,560
Public utilities	5,244	5,124	5,352	5,364	5,460	5,856	4,543	5,113
All other private	108	156	168	180	180	204	161	120
PUBLIC CONSTRUCTION	12,768	14,196	13,476	13,896	13,944	13,980	11,961	12,818
Residential buildings	264	360	372	360	396	432	266	292
Nonresidential buildings	3,912	4,464	4,200	4,392	4,560	4,512	4,218	4,072
Military facilities	1,416	1,380	1,296	1,248	1,248	1,284	1,313	1,395
Highways	4,608	5,292	4,872	5,208	4,968	4,920	4,050	4,470
Sewer and water systems	1,236	1,380	1,368	1,344	1,356	1,332	1,085	1,275
Sewer	684	768	780	768	744	732	615	701
Water	552	612	588	576	612	600	470	574
Public service enterprises	420	372	408	384	396	432	233	384
Conservation and development	816	840	840	840	888	924	701	826
All other public	96	108	120	120	132	144	95	104

Source: Departments of Commerce and Labor.

Table A-4: New Construction Put in Place: Value in 1947-49 Prices, by Type of Construction

Type of construction	(Millions of dollars)									
	1956	1957				Year				
	Apr.	Jan.	Feb.	Mar.	Apr.	1952	1953	1954	1955	1956
TOTAL NEW CONSTRUCTION	2,724	2,355	2,216	2,419	2,684	29,123	30,459	32,603	35,702	34,933
PRIVATE CONSTRUCTION	1,976	1,705	1,631	1,759	1,891	19,889	20,958	22,517	25,810	24,963
Residential buildings (nonfarm)	1,097	871	802	893	993	10,772	11,365	12,777	15,078	13,613
Nonresidential buildings	504	526	510	514	516	4,211	4,655	5,064	6,012	6,587
Industrial	182	195	194	194	195	1,909	1,807	1,690	1,946	2,304
Office buildings and warehouses	95	107	101	99	100	461	640	789	1,054	1,289
Stores, restaurants, and garages	115	91	88	94	92	525	857	989	1,472	1,441
Other nonresidential bldgs.	112	133	127	127	129	1,316	1,351	1,596	1,540	1,553
Farm construction	101	74	78	85	96	1,643	1,484	1,420	1,350	1,266
Public utilities	269	227	233	258	276	3,194	3,362	3,166	3,257	3,416
All other private	5	7	8	9	10	69	92	90	113	81
PUBLIC CONSTRUCTION	748	650	585	660	793	9,234	9,501	10,086	9,892	9,970
Residential buildings	18	22	23	23	26	550	459	281	213	225
Nonresidential buildings	235	243	221	248	269	3,465	3,531	3,738	3,291	3,016
Industrial	22	32	27	29	29	1,384	1,434	1,253	588	338
Educational	153	153	140	155	168	1,375	1,397	1,694	1,888	1,887
Hospital and institutional	17	17	17	19	22	401	297	286	249	220
Other nonresidential buildings ..	43	41	37	45	50	305	403	505	566	571
Military facilities	83	70	62	63	71	1,195	1,105	872	1,086	1,085
Highways	277	192	166	195	282	2,489	2,851	3,689	3,812	3,920
Sewer and water systems	70	66	62	69	74	639	681	724	769	859
Public service enterprises	20	14	13	16	18	129	122	133	157	240
Conservation and development	40	38	34	40	46	731	688	571	497	556
All other public	5	5	4	6	7	36	64	78	67	69

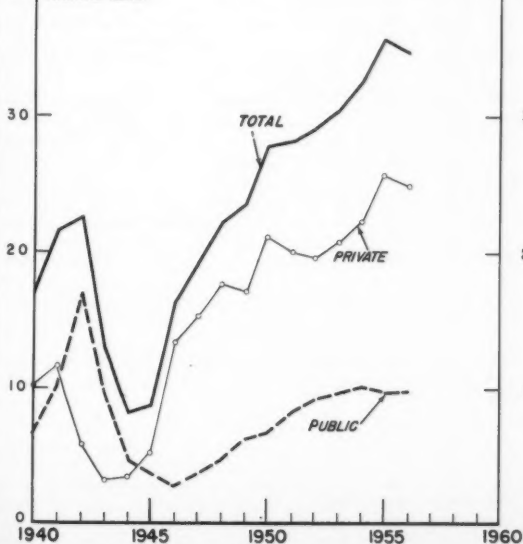
Source: Departments of Commerce and Labor.

Chart 2

New Construction Put in Place (In 1947-49 Prices)

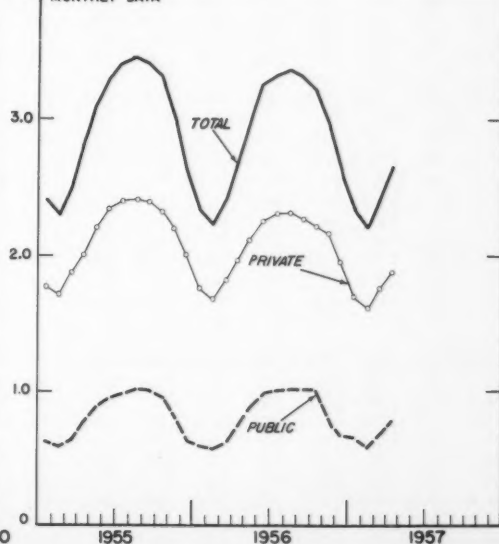
Billions of Dollars

ANNUAL DATA



Billions of Dollars

MONTHLY DATA



SOURCE: DEPARTMENTS OF COMMERCE AND LABOR.

CONSTRUCTION REVIEW C. D. 57-10-B

CONSTRUCTION REVIEW

Table A-5: New Public Construction Put in Place, by Source of Funds, Ownership, and Type of Construction

Source of funds, ownership, and type of construction	Value (in millions of dollars)								Percent change		
	1957					1956	First 5 months		May 1957 from--		First 5 months, 1956-57
	May	Apr.	Mar.	Feb.	Jan.	May	1957	1956	Apr. 1957	May 1956	
TOTAL PUBLIC CONSTRUCTION ..	1,229	1,062	888	783	871	1,123	4,833	4,312	+16	+ 9	+12
Federal funds	359	303	254	225	261	300	1,402	1,171	+18	+20	+20
Direct Federal.....	247	217	192	173	200	226	1,029	928	+14	+ 9	+11
Federal grants-in-aid ¹	112	86	62	52	61	74	373	243	+30	+51	+53
State and local funds	870	759	634	558	610	823	3,431	3,141	+15	+ 6	+ 9
FEDERALLY OWNED.....	247	217	192	173	200	226	1,029	928	+14	+ 9	+11
Residential buildings.....	8	6	4	3	3	1	24	1	+33	(2)	(2)
Nonresidential buildings	55	51	51	44	53	41	254	192	+ 8	+34	+32
Industrial.....	43	41	41	37	44	32	206	161	+ 5	+34	+28
Educational.....	1	1	1	0	1	1	4	1	0	0	+300
Hospital.....	5	4	4	4	3	3	20	13	+25	+67	+54
Administrative and service.....	3	3	3	2	3	1	14	5	0	+200	+180
Other nonresidential	3	2	2	1	2	4	10	12	+50	-25	-17
Military facilities.....	105	95	84	82	93	116	459	479	+11	- 9	- 4
Highways.....	9	7	4	3	4	8	27	25	+29	+13	+ 8
Conservation and development....	68	57	48	41	46	59	260	227	+19	+15	+15
All other federally owned	2	1	1	0	1	1	5	4	+100	+100	+25
STATE AND LOCALLY OWNED.....	982	845	696	610	671	897	3,804	3,384	+16	+ 9	+12
Residential buildings.....	27	28	26	27	26	21	134	103	- 4	+29	+30
Nonresidential buildings	332	323	294	261	283	293	1,493	1,641	+ 3	+13	- 9
Educational.....	235	232	214	194	210	215	1,085	992	+ 1	+ 9	+ 9
Hospital.....	28	27	23	19	21	21	118	96	+ 4	+33	+23
Administrative and service	35	33	29	25	27	28	149	112	+ 6	+25	+33
Other nonresidential.....	34	31	28	23	25	29	141	134	+10	+17	+ 5
Highways.....	446	328	226	192	221	419	1,413	1,276	+36	+ 6	+11
Sewer and water systems	117	113	104	93	100	109	527	462	+ 4	+ 7	+14
Sewer.....	64	63	58	53	56	60	294	255	+ 2	+ 7	+15
Water.....	53	50	46	40	44	49	233	207	+ 6	+ 8	+13
All other State and locally owned	60	53	46	37	41	55	237	209	+13	+ 9	+13

See footnotes at end of table.

Table A-5: New Public Construction Put in Place, by Source of Funds, Ownership, and Type of Construction--Continued

Source of funds, ownership, and type of construction	Value (in millions of dollars)												Annual total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1955													
TOTAL PUBLIC CONSTRUCTION	761	706	784	923	1,058	1,135	1,190	1,251	1,224	1,157	983	789	11,961
Federal funds.....	257	227	248	281	313	336	343	354	346	340	286	227	3,558
Direct Federal.....	225	195	211	227	244	261	261	260	259	255	219	183	2,800
Federal grants-in-aid ¹	32	32	37	54	69	75	82	94	87	85	67	44	758
State and local funds	504	479	536	642	745	799	847	897	878	817	697	562	8,403
FEDERALLY OWNED	225	195	211	227	244	261	261	260	259	255	219	183	2,800
Residential buildings	0	0	0	0	0	0	0	1	0	1	0	0	2
Nonresidential buildings	95	79	80	78	77	76	68	59	56	54	45	35	802
Industrial	90	77	76	74	71	68	61	51	45	40	38	30	721
Educational	0	0	0	0	1	2	0	0	1	2	0	0	6
Hospital	2	1	1	2	2	2	2	2	2	2	2	2	22
Administrative and service	1	0	1	0	1	1	2	2	2	2	1	1	14
Other nonresidential	2	1	2	2	2	3	3	4	6	8	4	2	39
Military facilities	81	76	82	96	107	120	125	133	138	138	118	99	1,313
Highways	3	2	3	4	6	8	10	11	10	8	6	4	75
Conservation and development	45	38	45	48	53	56	57	55	54	53	49	45	598
All other federally owned.....	1	0	1	1	1	1	1	1	1	1	1	0	10
STATE AND LOCALLY OWNED	536	511	573	696	814	874	929	991	965	902	764	606	9,161
Residential buildings	22	21	23	22	21	24	20	22	23	22	22	22	264
Nonresidential buildings	514	490	550	674	793	850	909	969	942	880	742	584	8,897
Educational	182	178	190	202	210	215	220	223	220	210	200	186	2,436
Hospital	23	21	25	25	26	28	29	29	29	25	22	18	300
Administrative and service	20	20	25	28	30	30	31	32	31	26	23	21	317
Other nonresidential	22	23	27	30	31	34	35	35	36	34	30	26	363
Highways	167	159	176	272	369	407	447	497	477	444	339	221	3,975
Sewer and water systems.....	76	70	81	88	96	99	104	105	100	97	89	80	1,085
Sewer	44	40	45	50	54	56	60	59	56	54	51	46	615
Water	32	30	36	38	42	43	44	46	44	43	38	34	470
All other State and locally owned.....	24	19	26	29	31	37	43	48	49	44	39	32	421
1956													
TOTAL PUBLIC CONSTRUCTION	752	708	779	950	1,123	1,258	1,313	1,352	1,352	1,299	1,042	890	12,818
Federal funds.....	212	195	213	251	300	355	372	385	389	383	312	268	3,635
Direct Federal.....	173	160	175	194	226	265	279	289	284	273	244	212	2,774
Federal grants-in-aid ¹	39	35	38	57	74	90	93	96	105	110	68	56	861
State and local funds	540	513	566	699	823	903	941	967	963	916	730	622	9,183
FEDERALLY OWNED	173	160	175	194	226	265	279	289	284	273	244	212	2,774
Residential buildings	0	0	0	0	1	1	1	2	2	3	4	3	17
Nonresidential buildings	41	38	37	35	41	55	62	61	56	54	55	53	588
Industrial	36	33	31	29	32	38	38	43	41	42	45	45	453
Educational	0	0	0	0	1	1	1	2	2	1	0	0	8
Hospital	2	2	3	3	3	3	3	3	4	4	4	3	37
Administrative and service	1	1	1	1	1	2	4	4	4	4	4	3	30
Other nonresidential	2	2	2	2	4	11	16	9	5	3	2	2	60
Military facilities	87	82	90	104	116	135	136	143	146	141	117	98	1,395
Highways	4	3	4	6	8	9	10	11	10	9	7	4	85
Conservation and development	40	37	43	48	59	64	68	70	68	65	60	53	675
All other federally owned	1	0	1	1	1	1	2	2	2	1	1	1	14
STATE AND LOCALLY OWNED	579	548	604	756	897	993	1,034	1,063	1,068	1,026	798	678	10,044
Residential buildings.....	20	21	18	23	21	23	22	23	23	27	27	27	275
Nonresidential buildings.....	559	526	586	733	876	970	1,011	1,039	1,035	971	771	651	9,769
Educational	190	187	195	205	215	220	230	234	229	225	210	201	2,541
Hospital	18	17	20	20	21	22	23	26	26	26	22	20	261
Administrative and service	19	18	22	25	28	30	31	35	35	34	29	26	332
Other nonresidential.....	25	24	27	29	29	31	32	34	35	32	28	24	350
Highways	192	174	189	302	419	492	508	519	533	503	319	235	4,385
Sewer and water systems.....	82	77	92	102	109	115	122	125	121	120	110	100	1,275
Sewer	46	42	50	57	60	63	68	69	65	65	60	56	701
Water	36	35	42	45	49	52	54	56	56	55	50	44	574
All other State and locally owned	33	30	41	50	55	60	66	67	66	59	53	45	625

Source: Departments of Commerce and Labor.

¹Construction programs currently receiving Federal grants-in-aid cover highways, schools, hospitals, airports, and miscellaneous community facilities.²Percent increase exceeds 300.

Part B--Housing

Table B-1: New Nonfarm Dwelling Units Started, by Ownership, Location, and Type of Structure

Period	Total	Ownership		Location ¹		Type of structure		
		Private	Public	Metro- politan	Nonmetro- politan	1-family houses	Units in 2-or-more family structures	
							All	2-4 family
							5-or-more family	
NUMBER OF NEW DWELLING UNITS (in thousands)								
Year: 1946.....	670.5	662.5	8.0	(2)	(2)	590.0	80.5	(3)
1947	849.0	845.6	3.4	(2)	(2)	740.2	108.8	(3)
1948	931.6	913.5	18.1	(2)	(2)	766.6	165.0	(3)
1949	1,025.1	988.8	36.3	(2)	(2)	794.3	230.8	(3)
1950	1,396.0	1,352.2	43.8	1,021.6	374.4	1,154.1	241.9	(3)
1951	1,091.3	1,020.1	71.2	776.8	314.5	900.1	191.2	(3)
1952	1,127.0	1,068.5	58.5	794.9	332.1	942.5	184.5	(3)
1953	1,103.8	1,068.3	35.5	803.5	300.3	937.8	166.0	(3)
1954	1,220.4	1,201.7	18.7	896.9	323.5	1,077.9	142.5	51.9
1955	1,328.9	1,309.5	19.4	975.8	353.1	1,194.4	134.5	49.2
1956	1,118.1	1,093.9	24.2	779.8	338.3	989.7	128.4	46.4
First 4 months, 1956.....	363.5	354.5	9.0	260.0	103.5	322.2	41.3	15.3
First 4 months, 1957.....	303.0	287.6	15.4	210.4	92.6	(4)	(4)	(4)
1956: April	111.4	109.9	1.5	76.2	35.2	100.1	11.3	4.1
May	113.7	110.8	2.9	77.6	36.1	101.3	12.4	4.4
June	107.4	104.6	2.8	74.5	32.9	96.5	10.9	3.9
July	101.1	99.0	2.1	69.7	31.4	90.7	10.4	3.9
August	103.9	103.2	.7	70.9	33.0	93.2	10.7	3.7
September	93.9	90.7	3.2	62.3	31.6	82.9	11.0	3.7
October	93.6	91.2	2.4	64.9	28.7	81.8	11.8	4.4
November	77.4	77.0	.4	54.8	22.6	67.7	9.7	3.9
December	63.6	62.9	.7	45.1	18.8	53.4	10.2	3.2
1957: January	63.0	60.1	2.9	44.0	19.0	52.2	10.8	3.5
February	65.0	62.5	2.5	46.2	18.8	(4)	(4)	(4)
March	83.0	75.5	7.5	56.4	26.6	(4)	(4)	(4)
April	92.0	89.5	2.5	63.8	28.2	(4)	(4)	(4)
Percent change								
First 4 months, 1956-57	-16.6	-18.9	+71.1	-19.1	-10.5	--	--	--
March-April, 1957	+10.8	+18.5	-66.7	+13.1	+ 6.0	--	--	--
April, 1956-57	-17.4	-18.6	+66.7	-16.3	-19.9	--	--	--
PERCENT DISTRIBUTION								
Year: 1946	100	98.8	1.2	--	--	88.0	12.0	--
1947	100	99.6	.4	--	--	87.2	12.8	--
1948	100	98.1	1.9	--	--	82.3	17.7	--
1949	100	96.5	3.5	--	--	77.5	22.5	--
1950	100	96.9	3.1	73.2	26.8	82.7	17.3	--
1951	100	93.5	6.5	71.2	28.8	82.5	17.5	--
1952	100	94.8	5.2	70.5	29.5	83.6	16.4	--
1953	100	96.8	3.2	72.8	27.2	85.0	15.0	--
1954	100	98.5	1.5	73.5	26.5	88.3	11.7	4.3
1955	100	98.5	1.5	73.4	26.6	89.9	10.1	3.7
1956	100	97.8	2.2	69.7	30.3	88.5	11.5	4.2
First 4 months, 1956	100	97.5	2.5	71.5	28.5	88.6	11.4	4.2
First 4 months, 1957	100	94.9	5.1	69.4	30.6	--	--	--
1956: April	100	98.7	1.3	68.4	31.6	89.9	10.1	3.7
May	100	97.4	2.6	68.2	31.8	89.1	10.9	3.9
June	100	97.4	2.6	69.4	30.6	89.9	10.1	3.6
July	100	97.9	2.1	68.9	31.1	89.7	10.3	3.9
August	100	99.3	.7	68.2	31.8	89.7	10.3	3.6
September	100	96.6	3.4	66.3	33.7	88.3	11.7	3.9
October	100	97.4	2.6	69.3	30.7	87.4	12.6	4.7
November	100	99.5	.5	70.8	29.2	87.5	12.5	5.0
December	100	98.9	1.1	70.9	29.1	84.0	16.0	5.0
1957: January	100	95.4	4.6	69.8	30.2	82.9	17.1	5.6
February	100	96.2	3.8	71.1	28.9	--	--	--
March	100	91.0	9.0	68.0	32.0	--	--	--
April	100	97.3	2.7	69.3	30.7	--	--	--

Source: Department of Labor.

¹ Data by urban and rural-nonfarm classification for 1920-53 are available upon request. ² Annual data not available before 1950; monthly data not available before January 1953. ³ Not available before January 1954. Tabulations showing the number of units in 2-family and 3-or-more family structures for 1920-53 are available upon request. ⁴ Not yet available.

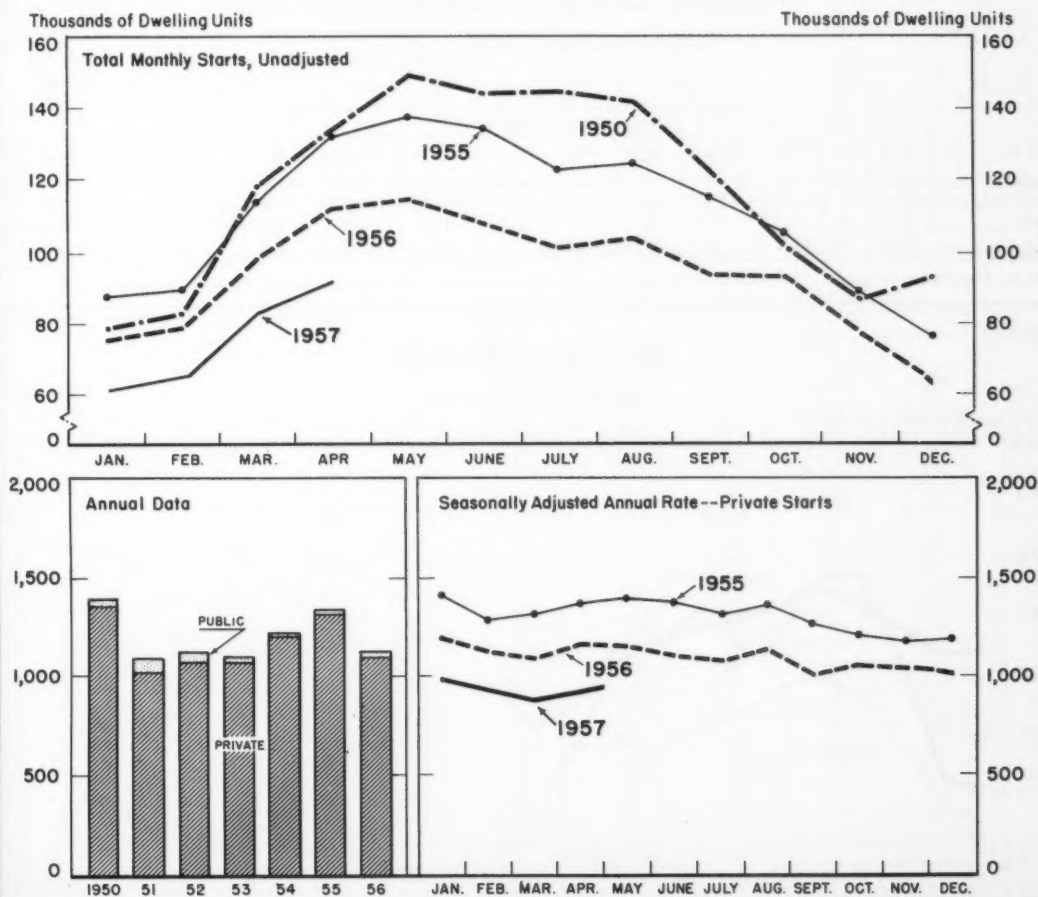
Table B-2: New Private Nonfarm Dwelling Units Started: Seasonally Adjusted Annual Rate

Year	Number of new dwelling units (in thousands)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1946.....	682	709	756	719	698	662	642	638	601	607	612	647
1947.....	694	720	696	710	749	802	847	899	981	1,018	1,013	962
1948.....	938	829	955	1,019	997	990	969	898	862	806	802	807
1949.....	800	796	814	885	905	929	964	1,028	1,094	1,156	1,240	1,250
1950.....	1,306	1,310	1,406	1,390	1,448	1,476	1,460	1,478	1,282	1,149	1,120	1,269
1951.....	1,343	1,156	1,068	990	983	948	925	961	1,052	1,002	976	967
1952.....	1,000	1,086	1,060	1,037	1,039	1,029	1,084	1,075	1,099	1,121	1,100	1,092
1953.....	1,102	1,083	1,122	1,134	1,097	1,082	1,045	1,021	1,024	1,026	1,050	1,032
1954.....	1,056	1,081	1,086	1,121	1,111	1,175	1,221	1,244	1,260	1,275	1,377	1,458
1955.....	1,416	1,286	1,314	1,374	1,398	1,371	1,318	1,346	1,262	1,209	1,179	1,192
1956.....	1,195	1,127	1,094	1,157	1,146	1,091	1,070	1,136	1,008	1,052	1,027	1,020
1957.....	975	910	880	940								

Source: Department of Labor.

Chart 3.

Housing Starts (UNADJUSTED AND SEASONALLY ADJUSTED)



SOURCE: DEPARTMENT OF LABOR.

CONSTRUCTION REVIEW C.D.-57-10-C

CONSTRUCTION REVIEW

Table B-3: New Private 1-Family Houses Started: Average Construction Cost

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
AVERAGE CONSTRUCTION COST													
1946.....	\$5,250	\$5,400	\$5,850	\$5,575	\$5,475	\$5,425	\$5,375	\$5,450	\$5,450	\$5,625	\$5,675	\$5,575	\$5,525
1947.....	5,700	5,825	6,150	6,275	6,250	6,450	6,725	6,950	7,025	7,275	7,525	7,650	6,750
1948.....	7,250	7,450	7,550	7,775	7,950	8,050	8,050	8,100	7,900	7,825	7,900	7,900	7,850
1949.....	7,650	7,525	7,450	7,500	7,650	7,675	7,525	7,650	7,725	7,675	7,675	7,625	7,625
1950.....	7,625	7,850	8,225	8,450	8,450	8,750	8,875	9,125	8,900	9,200	9,075	9,200	8,675
1951.....	9,100	9,250	9,175	9,325	9,475	9,475	9,400	9,300	9,450	9,225	9,250	9,125	9,300
1952.....	9,050	9,275	9,350	9,550	9,575	9,675	9,500	9,425	9,600	9,525	9,550	9,525	9,475
1953.....	9,400	9,600	9,800	10,000	9,900	10,000	10,125	10,175	10,200	10,175	9,975	10,000	9,950
1954.....	9,750	9,800	10,075	10,600	10,850	10,750	10,850	10,750	10,675	10,800	10,850	11,075	10,625
1955.....	10,575	11,125	11,250	11,250	11,400	11,400	11,475	11,425	11,525	11,575	11,575	11,625	11,350
1956.....	11,325	11,750	12,150	12,275	12,300	12,300	12,375	12,275	12,325	12,425	12,675	12,350	12,225
1957.....	12,175	(1)	(1)	(1)									
Percent change, 1956 to 1957													
	+7.5	--	--	--									

Source: Department of Labor.

¹ Not yet available.Table B-4: New Nonfarm Dwelling Units Started, by Region ¹

Region	Number of new dwelling units (in thousands)											Percent change, Jan. 1956-57
	1956								1957	Year		
	Jan.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	1955	1956	
TOTAL	75.1	107.4	101.1	103.9	93.9	93.6	77.4	63.6	63.0	1,328.9	1,118.1	-16.1
Northeast	12.4	24.2	21.8	20.8	19.2	20.1	16.5	12.4	9.3	273.1	228.8	-25.0
North Central....	15.7	31.2	29.9	29.2	28.1	26.2	19.2	14.2	10.7	356.0	303.1	-31.8
South.....	27.2	29.3	27.7	30.7	28.1	27.5	22.7	21.1	24.8	389.0	334.2	- 8.8
West	19.8	22.7	21.7	23.2	18.5	19.8	19.0	15.9	18.2	310.8	252.0	- 8.1

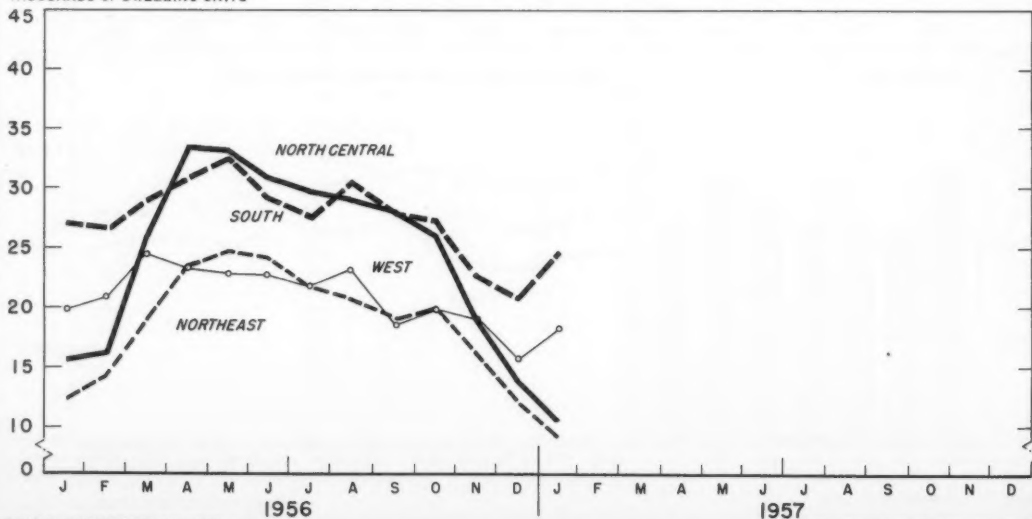
Source: Department of Labor.

¹ Composition of regions, and nonfarm population distribution by region, are shown below table A-2.

Chart 4

Housing Starts
(Regional Trends)

THOUSANDS OF DWELLING UNITS



SOURCE: DEPARTMENT OF LABOR.

CONSTRUCTION REVIEW C.D.-57-10-D

Table B-5: New Private Nonfarm Dwelling Units: Mortgages Applied for, Appraisals Requested, and Units Started Under FHA and VA Programs

Period	FHA-assisted units		VA-assisted units		Nonfarm dwelling units started		
	In applications*	Started (in thousands)	In appraisal requests	Started (in thousands)	U. S. total	FHA- assisted	VA- assisted
NUMBER OF DWELLING UNITS					PERCENT DISTRIBUTION		
Year: 1950.....	625,343	486.7	(1)	200.0	100	36	15
1951.....	267,127	263.5	164,365	148.7	100	26	15
1952.....	323,753	279.9	226,299	141.3	100	26	13
1953.....	327,323	252.0	251,437	156.6	100	24	15
1954.....	383,334	276.3	535,412	307.0	100	23	26
1955.....	314,888	276.7	620,776	392.9	100	21	30
1956.....	219,447	189.3	401,520	270.7	100	17	25
First 4 mos., 1956.....	85,557	62.8	149,698	87.4	100	18	25
First 4 mos., 1957.....	67,692	40.4	77,983	46.8	100	14	16
1956: April.....	23,755	19.8	45,769	26.4	100	18	24
May.....	24,278	19.7	44,395	26.6	100	18	24
June.....	18,047	18.4	35,620	26.4	100	18	25
July.....	17,589	17.6	34,634	25.2	100	18	25
August.....	18,531	18.6	36,518	24.4	100	18	24
September.....	13,892	15.1	30,007	24.0	100	17	26
October.....	17,181	15.5	29,678	24.0	100	17	26
November.....	13,469	12.1	21,941	17.8	100	16	23
December.....	10,903	9.6	19,029	15.0	100	15	24
1957: January.....	13,116	7.7	18,924	12.0	100	13	20
February.....	13,989	9.3	20,170	9.9	100	15	16
March.....	20,143	11.3	19,508	11.4	100	15	15
April.....	20,444	12.1	19,381	13.5	100	14	15
Percent change							
First 4 mos., 1956-57	-21	-36	-48	-46			

Source: Table compiled by Department of Labor from data reported by the Federal Housing Administration (HHFA) and the Veterans Administration. * For comparability with private dwelling units started, the data given here for FHA applications excludes units under the armed services (Capehart) housing program. ¹ Not available.

Table B-6: Nonfarm Mortgage Recordings of \$20,000 or Less: Number and Average Amount, and Total Amount by Type of Lender

Period	Total number (in thousands)	Average amount (dollars)	Total amount (in millions of dollars) recorded by--						
			All lenders	Savings and loan associations	Insurance companies	Commercial banks	Mutual savings banks	Individuals	All other lenders
Year: 1950.....	3,032	5,335	16,179	5,060	1,618	3,365	1,064	2,299	2,774
1951.....	2,878	5,701	16,405	5,295	1,615	3,370	1,013	2,539	2,572
1952.....	3,028	5,950	18,018	6,452	1,420	3,600	1,137	2,758	2,651
1953.....	3,164	6,241	19,747	7,365	1,480	3,680	1,327	2,841	3,055
1954.....	3,458	6,644	22,974	8,312	1,768	4,239	1,501	2,882	4,272
1955.....	3,913	7,279	28,484	10,452	1,932	5,617	1,858	3,362	5,265
1956.....	3,602	7,521	27,088	9,532	1,799	5,458	1,824	3,558	4,917
First 3 mos., 1956.....	862	7,401	6,380	2,180	436	1,325	386	844	1,209
First 3 mos., 1957.....	759	7,416	5,628	2,046	354	996	312	868	1,052
1956: March.....	309	7,360	2,271	816	152	468	128	300	408
April.....	303	7,494	2,269	827	148	470	128	295	401
May.....	324	7,511	2,434	872	159	508	152	318	425
June.....	319	7,583	2,417	877	165	494	162	309	410
July.....	312	7,621	2,374	851	159	464	168	307	425
August.....	336	7,562	2,544	921	163	508	181	319	452
September.....	290	7,534	2,185	779	139	441	163	275	388
October.....	322	7,535	2,425	848	154	475	183	327	438
November.....	277	7,608	2,108	717	136	409	152	293	401
December.....	257	7,582	1,951	660	138	366	148	270	369
1957: January.....	258	7,541	1,942	659	133	353	117	304	376
February.....	237	7,381	1,749	644	105	308	96	271	325
March.....	264	7,333	1,937	744	115	335	99	293	351
Percent change									
First 3 mos., 1956-57	-12	(1)	-12	-6	-19	-25	-19	+3	-13

Source: Table compiled by Department of Labor from data reported by the Federal Home Loan Bank Board.
less than one-half of 1 percent.

¹ Change of

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Table B-7: Housing Vacancy Rates: Vacancy-Occupancy Status and Condition of Dwelling Units, Nationally

Status and condition of dwelling units	(Percent distribution)								
	1950	1955				1956			
	Apr.	2d qtr.	3d qtr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.	1st qtr.
Total dwelling units	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Vacant dwelling units:									
Available for occupancy ¹	1.6	2.3	2.3	2.7	2.7	2.6	2.8	2.5	2.3
For rent ²	1.1	1.8	1.8	2.2	2.2	2.1	2.2	2.1	1.8
For sale .....	.5	.5	.5	.5	.5	.5	.6	.4	.5
Rented or sold, awaiting occupancy ¹	1.7	.5	.5	.4	.4	.5	.6	.4	.4
Held off market ¹	1.1	1.5	1.6	2.0	2.2	2.1	1.8	2.0	1.9
Dilapidated	1.1	1.2	1.1	1.2	1.1	1.0	1.0	1.1	1.2
Seasonal dwelling units ³	2.5	2.6	2.6	2.4	2.4	2.5	2.8	2.7	2.7
Occupied dwelling units	93.1	91.9	91.9	91.3	91.2	91.3	91.0	91.3	91.5

Source: Department of Commerce, Bureau of the Census, Housing and Construction Reports, Series H-111. ¹Nonseasonal, not dilapidated units. ²Comprises vacant units offered for rent, as well as those being offered either for rent or for sale. ³Comprises unoccupied units and units temporarily occupied by nonresidents, that is, persons with usual residence elsewhere.

Table B-8: Housing Vacancy Rates: Vacancy-Occupancy Status and Condition of Dwelling Units, by Regional and Metropolitan-Nonmetropolitan Location

Status and condition of dwelling units	(Percent distribution)															
	1950	1955	1956				1957	1950	1955	1956				1957		
	Apr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.	1st qtr.	Apr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.	1st qtr.		
	NORTHEAST							NORTH CENTRAL								
Total dwelling units	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Vacant dwelling units:																
Available for occupancy ¹	1.1	1.6	1.7	1.5	1.8	1.6	1.6	1.1	2.1	2.0	2.1	2.5	2.1	2.0		
For rent ² .....	.7	1.2	1.3	1.1	1.3	1.3	1.2	.7	1.7	1.6	1.6	2.0	1.7	1.5	
For sale .....	.4	.4	.4	.4	.5	.3	.4	.4	.4	.4	.5	.5	.4	.5	
Rented or sold, awaiting occupancy ¹	} 1.4	{	.4	.4	.5	.5	.4	1.5	{	.4	.4	.5	.6	.4	.4	
Held off market ¹9	.8	.8	.9	1.0			1.0	1.4	1.6	1.8	1.6	1.7	1.8
Dilapidated4	.3	.3	.2	.3			.3	.4	.8	.9	.8	.7	.6	.8	.9
Seasonal dwelling units ³	3.9	4.9	5.3	4.7	5.1	5.2	5.2	2.2	1.4	1.5	1.6	2.0	1.9	2.0		
Occupied dwelling units	93.2	91.9	91.5	92.3	91.4	91.4	91.4	94.4	93.8	93.7	93.3	92.7	93.1	92.9		
	SOUTH							WEST								
Total dwelling units	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Vacant dwelling units:																
Available for occupancy ¹	2.0	3.5	3.2	3.4	3.5	3.3	2.7	2.7	4.1	4.4	4.1	3.9	3.2	3.2		
For rent ²	1.5	3.0	2.7	2.8	2.9	2.8	2.2	2.0	3.2	3.7	3.5	3.1	2.7	2.6		
For sale .....	.5	.5	.5	.6	.6	.5	.5	.7	.9	.7	.6	.8	.5	.6	
Rented or sold, awaiting occupancy ¹	} 1.9	{	.3	.4	.5	.5	.4	2.3	{	.5	.4	.6	.7	.5	.4	
Held off market ¹			2.6	2.9	2.6	2.4	2.5			2.7	3.8	4.8	3.6	3.1	2.9	2.3
Dilapidated			2.2	2.2	2.0	2.1	1.9			2.2	2.4	1.0	1.0	1.1	.9	.8	.9
Seasonal dwelling units ³	1.4	1.3	1.3	1.7	1.9	1.6	1.7	2.3	2.4	1.5	2.1	2.2	1.8	1.6		
Occupied dwelling units	92.5	90.1	90.2	89.7	89.8	90.0	90.1	91.7	88.2	87.8	88.7	89.2	90.8	91.6		
	INSIDE METROPOLITAN AREAS							OUTSIDE METROPOLITAN AREAS								
Total dwelling units	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Vacant dwelling units:																
Available for occupancy ¹	1.6	2.5	2.4	2.4	2.5	2.2	2.0	1.6	2.9	3.0	3.0	3.2	2.8	2.6		
For rent ²	1.1	1.9	1.9	1.9	2.0	1.8	1.6	1.2	2.5	2.5	2.4	2.6	2.3	2.7		
For sale .....	.5	.6	.5	.5	.5	.4	.4	.4	.4	.5	.6	.6	.5	.5	
Rented or sold, awaiting occupancy ¹	} 1.2	{	.5	.5	.7	.5	.4	2.4	{	.3	.3	.4	.4	.4	.4	
Held off market ¹			1.0	1.1	1.1	1.0	1.1			1.2	3.3	3.8	3.4	3.0	3.1	3.0
Dilapidated4	.4	.5	.4	.3			.4	.5	2.0	2.2	1.9	1.9	1.8	2.1	2.3
Seasonal dwelling units ³	1.1	1.1	1.2	1.1	1.2	1.2	1.4	4.0	4.2	4.1	4.5	5.1	4.7	4.4		
Occupied dwelling units	95.7	94.5	94.3	94.5	94.3	94.6	94.5	90.0	87.1	86.9	86.8	86.6	86.9	87.3		

Source: Department of Commerce, Bureau of the Census, Housing and Construction Reports, Series H-111. 1, 2, and 3 to Table B-7 above.

NOTE: See footnotes

Part C--Building Permits

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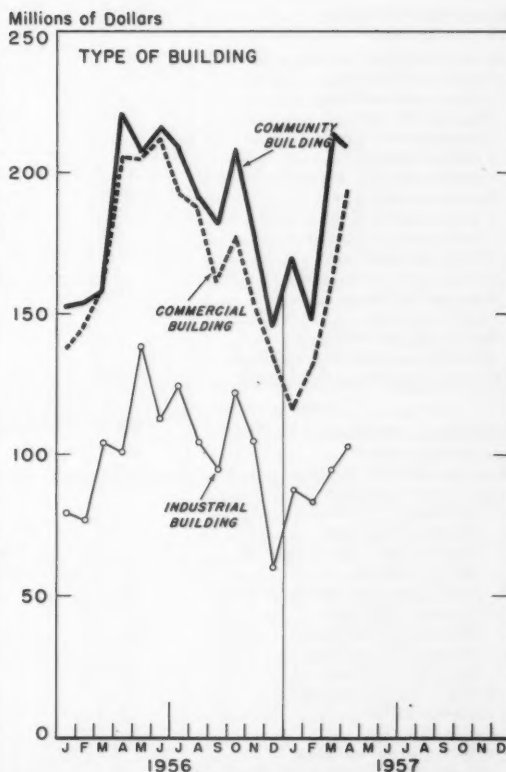
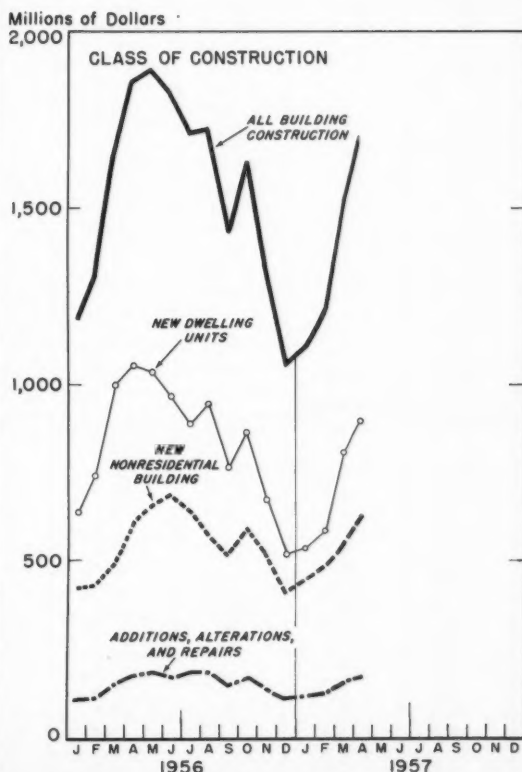
Table C-1: Building Permit Activity: Current Summary, by Type of Building Construction

Type of building construction	Valuation (in millions of dollars)						Percent change, Apr. 1956-57
	1957			1956	First 4 months		
	Apr.	Mar.	Feb.	Apr.	1957	1956	
All building construction ¹	1,698.6	1,526.5	1,215.3	1,875.4	5,543.0	6,043.2	- 9
Private	1,537.7	1,368.0	1,053.3	1,714.6	4,935.0	5,477.1	-10
Public	160.9	158.5	162.0	160.8	608.0	566.1	(2)
New dwelling units ³	894.6	800.7	584.6	1,064.5	2,815.1	3,449.9	-16
Number of new dwelling units	(81,366)	(72,757)	(55,717)	(98,734)	(261,467)	(327,881)	(-18)
New nonresidential building	610.9	552.0	490.5	621.3	2,094.6	1,990.6	- 2
Commercial buildings	192.4	162.4	132.2	206.1	602.9	649.5	- 7
Stores and other mercantile buildings	86.2	81.8	58.5	109.0	280.7	341.6	-21
All other commercial buildings	106.2	80.6	73.7	97.1	322.2	307.9	+ 9
Community buildings.....	209.0	214.6	149.7	224.7	741.5	689.5	- 7
Industrial buildings	102.8	94.3	83.3	107.9	367.7	379.8	- 5
All other nonresidential buildings	106.7	80.7	125.4	82.6	382.5	271.8	+29
Additions, alterations, and repairs.....	179.8	157.5	128.9	176.6	584.9	559.0	+ 2

Source: Department of Labor. ¹ Includes new nonhousekeeping residential building, not shown separately. ² Change of less than one-half of 1 percent. ³ Housekeeping only.

Chart 5

Building Permit Activity



SOURCE: DEPARTMENT OF LABOR.

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Table C-2: Building Permit Activity: Valuation, by Type of Building Construction and Region ¹

Type of building construction	Valuation (in millions of dollars)						Percent change, 1st 3 months 1956-57
	1956	1957			First 3 months		
	Mar.	Jan.	Feb.	Mar.	1956	1957	
UNITED STATES							
All building construction ²	1,683.7	1,110.0	1,207.9	1,526.5	4,167.8	3,844.4	- 8
New dwelling units ³	1,009.2	535.2	584.6	800.7	2,385.4	1,920.5	-19
New nonresidential building	511.0	448.6	483.1	552.0	1,369.3	1,483.7	+ 8
Commercial buildings	160.9	116.2	132.0	162.4	443.4	410.5	- 7
Amusement buildings	6.9	7.2	5.7	10.1	19.3	23.0	+19
Commercial garages	3.9	4.2	3.7	3.6	10.8	11.5	+ 6
Gasoline and service stations	12.7	12.5	12.2	14.0	33.6	38.7	+15
Office buildings	42.8	38.0	51.9	52.8	147.1	142.7	- 3
Stores and other mercantile bldgs..	94.6	54.2	58.5	81.8	232.6	194.5	-16
Community buildings	157.7	168.1	149.7	214.6	464.8	532.5	+15
Educational buildings	108.1	110.9	97.9	138.0	327.1	346.7	+ 6
Institutional buildings	14.8	30.3	22.2	36.2	48.8	88.6	+82
Religious buildings	34.8	27.0	29.7	40.5	88.9	97.2	+ 9
Garages, private residential	13.1	5.2	6.7	14.5	25.6	26.4	+ 3
Industrial buildings	114.0	87.3	83.3	94.3	271.9	264.9	- 3
Public buildings	20.6	24.9	45.8	24.8	50.9	95.4	+87
Public utilities buildings	26.7	35.0	51.3	21.9	59.4	108.2	+82
All other nonresidential buildings	18.0	11.9	14.3	19.4	53.2	45.6	-14
Additions, alterations, and repairs	150.5	118.7	128.9	157.5	382.4	405.1	+ 6
Northeast							
All building construction ²	321.0	196.4	236.0	334.1	803.0	766.4	- 5
New dwelling units ³	204.9	86.9	96.7	158.0	464.7	341.6	-26
New nonresidential building	82.9	83.3	114.1	138.7	256.9	336.1	+31
Commercial buildings	22.6	24.2	20.9	39.2	76.0	84.2	+11
Amusement buildings	2.8	2.1	.8	2.0	5.1	4.9	- 4
Commercial garages .....	.6	.5	1.1	2.0	3.5	3.6	+ 3
Gasoline and service stations	2.2	2.3	2.1	2.1	5.8	6.5	+12
Office buildings	4.7	7.9	8.2	8.1	23.9	24.2	+ 1
Stores and other mercantile bldgs..	12.3	11.3	8.7	25.0	37.7	45.1	+20
Community buildings	33.5	34.8	30.7	58.7	106.9	124.2	+16
Educational buildings	23.1	22.5	23.1	39.7	80.0	85.3	+ 7
Institutional buildings	2.2	6.2	2.3	10.0	7.5	18.5	+147
Religious buildings	8.2	6.1	5.3	8.9	19.5	20.2	+ 4
Garages, private residential	2.8	1.0	1.2	3.1	5.2	5.2	0
Industrial buildings	15.5	13.2	19.0	23.3	47.6	55.6	+17
Public buildings	2.0	4.8	18.8	4.7	5.6	28.3	(4)
Public utilities buildings	3.1	3.6	21.1	6.6	7.1	31.4	(4)
All other nonresidential buildings	3.3	1.7	2.4	3.1	8.4	7.2	-14
Additions, alterations, and repairs	30.9	24.7	24.0	34.8	75.7	83.5	+10
North Central							
All building construction ²	500.6	242.0	317.0	444.6	1,116.3	1,003.7	-10
New dwelling units ³	312.7	106.7	146.1	240.0	662.3	492.7	-26
New nonresidential building	147.0	110.0	136.8	163.3	352.3	410.0	+16
Commercial buildings	45.6	18.7	38.9	51.1	111.6	108.8	- 3
Amusement buildings	2.1	1.6	1.5	3.3	5.4	6.5	+20
Commercial garages	1.0	.5	.8	.8	2.5	2.1	-16
Gasoline and service stations	2.9	3.1	3.5	4.7	8.1	11.4	+41
Office buildings	15.0	6.1	20.4	20.0	32.8	46.5	+42
Stores and other mercantile bldgs..	24.7	7.4	12.7	22.4	62.8	42.4	-32
Community buildings	45.7	42.9	45.7	58.5	118.1	147.1	+25
Educational buildings	31.2	23.1	24.7	35.2	82.4	82.9	+ 1
Institutional buildings	4.4	12.8	11.7	9.8	12.2	34.3	+181
Religious buildings	10.1	7.0	9.3	13.5	23.4	29.8	+27
Garages, private residential	5.6	1.4	2.3	7.0	9.1	10.8	+19
Industrial buildings	29.1	35.3	21.5	32.1	72.1	88.9	+23
Public buildings	3.0	1.0	8.9	5.9	13.3	15.8	+19
Public utilities buildings	13.7	8.7	17.4	5.8	20.8	32.0	+54
All other nonresidential buildings	4.2	1.9	2.0	2.8	7.4	6.7	- 9
Additions, alterations, and repairs	38.8	24.8	32.8	39.2	95.8	96.8	+ 1

See footnotes at end of table.

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Table C-2: Building Permit Activity: Valuation, by Type of Building Construction and Region ¹-Continued

Type of building construction	Valuation (in millions of dollars)						Percent change, 1st 3 months 1956-57
	1956	1957			First 3 months		
	Mar.	Jan.	Feb.	Mar.	1956	1957	
	South						
All building construction ²	411.5	339.7	357.6	354.9	1,096.5	1,052.2	- 4
New dwelling units ³	235.6	172.5	175.2	185.5	606.4	533.2	-12
New nonresidential building	131.2	131.0	136.6	118.0	373.4	385.6	+ 3
Commercial buildings	51.8	37.5	42.4	37.7	155.4	117.6	-24
Amusement buildings	1.2	1.5	1.7	2.3	3.9	5.6	+44
Commercial garages	1.6	.8	.3	.5	2.6	1.7	-35
Gasoline and service stations	4.7	5.0	4.3	4.6	12.7	13.9	+ 9
Office buildings	11.9	11.2	15.2	11.9	59.2	38.4	-35
Stores and other mercantile bldgs..	32.3	18.9	20.8	18.4	77.1	58.1	-25
Community buildings	46.3	59.8	44.1	48.5	130.2	152.4	+17
Educational buildings	30.4	42.1	31.6	25.6	79.0	99.3	+26
Institutional buildings	4.0	8.2	2.7	11.3	19.8	22.1	+12
Religious buildings	12.0	9.6	9.8	11.6	31.4	31.0	- 1
Garages, private residential	2.0	1.1	1.3	1.7	4.5	4.1	- 9
Industrial buildings	14.7	13.7	25.2	15.3	40.5	54.2	+34
Public buildings	7.1	10.3	12.7	6.9	14.1	29.8	+111
Public utilities buildings	6.2	6.4	7.8	4.3	20.4	18.5	- 9
All other nonresidential buildings	3.1	2.2	3.3	3.6	8.3	9.0	+ 8
Additions, alterations, and repairs	39.7	35.3	39.8	43.2	108.6	118.3	+ 9
	West						
All building construction ²	450.6	331.9	297.3	392.9	1,152.1	1,022.1	-11
New dwelling units ³	256.0	169.1	166.7	217.1	652.0	552.9	-15
New nonresidential building	149.9	124.3	95.7	132.0	386.7	351.9	- 9
Commercial buildings	40.9	35.8	29.8	34.3	100.4	99.9	(5)
Amusement buildings .....	.8	1.9	1.7	2.5	4.9	6.0	+22
Commercial garages .....	.6	2.3	1.5	.4	2.3	4.2	+83
Gasoline and service stations	3.0	2.1	2.3	2.6	6.9	7.0	+ 1
Office buildings	11.2	12.9	8.0	12.8	31.3	33.7	+ 8
Stores and other mercantile bldgs..	25.3	16.6	16.3	16.1	55.0	49.0	-11
Community buildings	32.2	30.6	29.3	49.0	109.6	108.9	- 1
Educational buildings	23.5	23.3	18.5	37.5	85.7	79.2	- 8
Institutional buildings	4.1	3.1	5.5	5.0	9.3	13.6	+46
Religious buildings	4.6	4.3	5.3	6.4	14.5	16.0	+10
Garages, private residential	2.7	1.7	1.9	2.7	6.8	6.4	- 6
Industrial buildings	54.7	25.1	17.6	23.6	111.8	66.2	-41
Public buildings	8.4	8.8	5.4	7.3	18.0	21.5	+19
Public utilities buildings	3.6	16.2	5.0	5.2	11.1	26.4	+138
All other nonresidential buildings	7.4	6.1	6.7	9.9	29.1	22.7	-22
Additions, alterations, and repairs	41.1	33.8	32.4	40.2	102.3	106.4	+ 4

Source: Department of Labor.

¹ Composition of regions, and nonfarm population distribution by region, are shown below table A-2. ² Includes new nonhousekeeping residential building, not shown separately. ³ Housekeeping only. ⁴ Percent increase exceeds 300. ⁵ Change of less than one-half of 1 percent.

Table C-3: Building Permit Activity: Number of Nonresidential Buildings, by Type of Building

Type of building	1956						1957		
	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Amusement buildings.....	186	253	153	183	185	107	141	158	188
Commercial garages.....	216	180	184	274	212	165	149	122	185
Educational buildings.....	464	428	359	449	395	327	327	344	408
Garages, private residential.....	14,235	27,294	25,407	25,301	14,666	6,632	5,345	6,913	13,750
Gasoline and service stations.....	842	974	959	1,036	874	695	768	718	880
Industrial buildings.....	1,335	1,234	1,284	1,500	1,329	893	1,058	951	1,185
Institutional buildings.....	78	94	79	124	74	51	58	73	94
Office buildings.....	717	682	601	648	578	475	487	545	681
Religious buildings.....	469	520	522	534	418	314	333	391	500
Stores & other mercantile buildings	3,178	2,862	2,344	2,825	2,274	1,733	1,956	2,052	2,655

Source: Department of Labor.

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Table C-4: Building Permit Activity: Valuation and Number of New Dwelling Units, by Type of Structure, Public-Private Ownership, and Region ¹

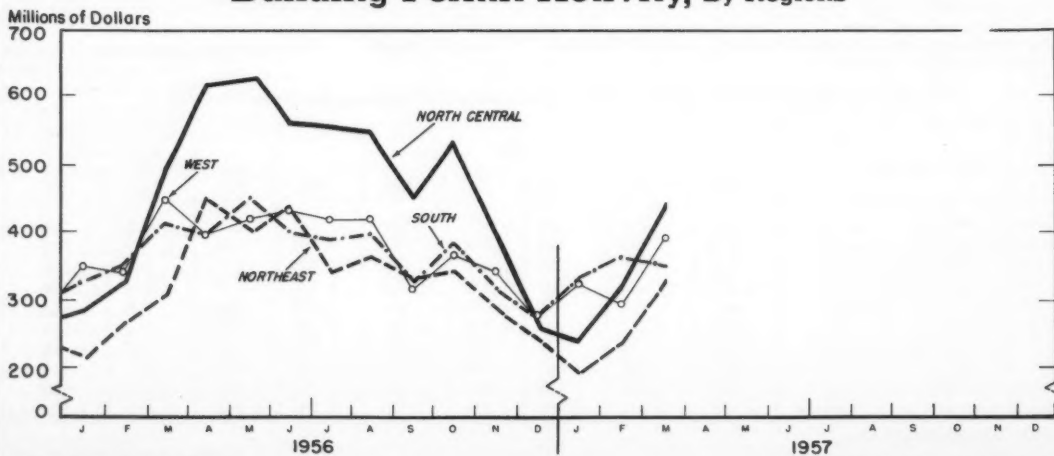
(Housekeeping units only)

Ownership and type of structure	Valuation (in millions of dollars)					Number of dwelling units				
	1956		1957		First 3 months	1956		1957		First 3 months
	Mar.	Feb.	Mar.	1956	1957	Mar.	Feb.	Mar.	1956	1957
UNITED STATES										
All new dwelling units..	1,009.2	584.6	800.7	2,385.4	1,920.5	95,169	55,718	72,757	229,147	180,101
Privately owned	978.2	571.1	799.0	2,335.7	1,898.1	92,306	54,381	72,656	224,234	177,853
1-family	907.8	504.2	710.2	2,162.5	1,679.8	81,253	43,842	60,519	197,565	145,370
2-4 family	30.9	24.6	30.5	72.2	75.8	4,707	3,755	4,484	11,214	11,487
5-or-more family	39.5	42.3	58.2	101.0	142.4	6,346	6,784	7,653	15,455	20,996
Publicly owned	30.9	13.6	1.7	49.6	22.4	2,863	1,337	101	4,913	2,248
Northeast										
All new dwelling units..	204.9	96.7	158.0	464.7	341.6	18,715	8,651	13,341	43,429	29,778
Privately owned	188.2	93.0	156.4	435.2	334.0	17,302	8,203	13,245	40,599	28,949
1-family	169.2	80.6	140.4	389.8	294.6	14,896	6,627	11,585	34,573	24,223
2-4 family	6.4	3.8	5.4	15.5	12.9	903	518	737	2,234	1,787
5-or-more family	12.6	8.6	10.5	29.9	26.4	1,503	1,058	923	3,792	2,939
Publicly owned	16.7	3.7	1.7	29.6	7.7	1,413	448	96	2,830	829
North Central										
All new dwelling units..	312.7	146.1	240.0	662.3	492.7	25,204	11,600	18,589	53,760	38,767
Privately owned	302.0	145.6	240.0	649.5	489.3	24,142	11,563	18,589	52,457	38,504
1-family	289.6	133.2	215.8	618.6	443.5	22,632	9,875	15,978	49,023	33,057
2-4 family	8.9	6.6	10.3	19.3	21.3	945	707	1,081	2,051	2,288
5-or-more family	3.6	5.8	14.0	11.6	24.5	565	981	1,530	1,383	3,159
Publicly owned	10.6	.5	0	12.7	3.4	1,062	37	0	1,303	263
South										
All new dwelling units..	235.6	175.2	185.5	606.4	533.2	25,102	18,381	19,362	65,805	55,697
Privately owned	232.5	166.2	185.5	600.9	522.3	24,764	17,566	19,361	65,205	54,582
1-family	218.5	153.2	172.1	563.9	480.9	22,194	15,228	17,063	58,883	47,554
2-4 family	6.0	5.0	4.1	14.9	13.4	1,175	1,041	836	3,073	2,720
5-or-more family	8.0	8.0	9.4	22.1	28.0	1,395	1,297	1,462	3,249	4,308
Publicly owned	3.2	9.0	(2)	5.5	10.9	338	815	1	600	1,115
West										
All new dwelling units..	256.0	166.7	217.1	652.0	552.9	26,148	17,086	21,465	66,153	55,859
Privately owned	255.5	166.3	217.1	650.1	552.5	26,098	17,049	21,461	65,973	55,818
1-family	230.6	137.2	182.0	590.2	460.9	21,531	12,112	15,893	55,086	40,536
2-4 family	9.7	9.2	10.7	22.5	28.2	1,684	1,489	1,830	3,856	4,692
5-or-more family	15.2	19.9	24.4	37.5	63.5	2,883	3,448	3,738	7,031	10,590
Publicly owned .....	.5	.4	(2)	1.8	.4	50	37	4	180	41

Source: Department of Labor.
than \$50,000.¹ Composition of regions, and nonfarm population distribution by region, are shown below table A-2. ² Less

Chart 6.

Building Permit Activity, By Regions



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Table C-5: Building Permit Activity: Valuation, by Metropolitan-Nonmetropolitan Location and by State

State	(Millions of dollars)				1957		First 2 months		Percent change, 1st 2 mos. 1956-57
	1956								
	Feb.	Oct.	Nov.	Dec.	Jan.	Feb.	1956	1957	
ALL STATES	1,299.0	1,652.8	1,340.4	1,053.0	1,110.0	1,207.9	2,482.5	2,317.9	- 7
Metropolitan areas	1,040.5	1,294.1	1,032.0	841.6	863.7	957.2	1,974.7	1,820.9	- 8
Nonmetropolitan areas	258.5	358.7	308.4	211.4	246.3	250.7	507.8	497.0	- 2
Alabama	14.2	14.3	14.7	11.0	14.3	15.2	28.2	29.5	+ 5
Arizona	18.4	19.7	16.3	11.4	26.8	13.6	29.4	40.4	+37
Arkansas	5.1	4.5	3.7	3.4	5.0	9.0	8.5	14.0	+65
California	255.2	255.6	242.0	203.5	229.4	212.3	496.8	441.7	-11
Colorado	22.6	41.2	23.0	20.2	19.7	18.3	41.8	38.0	- 9
Connecticut	32.0	33.0	37.1	22.6	21.1	22.3	48.6	43.3	-11
Delaware	2.8	7.8	6.5	3.4	6.1	5.4	8.7	11.5	+32
District of Columbia	2.5	17.9	4.4	2.4	5.3	2.8	7.4	8.0	+ 8
Florida	70.1	77.5	65.7	57.8	70.3	72.0	132.0	142.3	+ 8
Georgia	19.8	19.2	17.4	12.8	20.2	22.1	38.3	42.3	+10
Idaho	1.1	3.3	3.3	1.3	2.0	1.3	2.4	3.3	+38
Illinois	86.2	118.8	92.6	75.2	61.5	93.2	163.7	154.6	- 6
Indiana	27.0	40.1	30.7	20.5	23.2	20.7	46.9	43.9	- 6
Iowa	9.0	21.6	13.0	7.6	4.3	6.0	14.9	10.2	-32
Kansas	12.1	13.3	14.2	8.7	5.8	10.0	21.9	15.8	-28
Kentucky	10.6	11.2	10.6	10.1	6.5	13.6	17.1	20.1	+18
Louisiana	22.0	21.7	14.9	18.6	19.3	20.4	45.9	39.8	-13
Maine	2.0	2.7	2.7	.8	.6	1.0	3.8	1.6	-58
Maryland	33.5	36.4	28.1	28.5	27.3	37.9	58.3	65.2	+12
Massachusetts	25.6	42.5	39.5	25.9	18.5	28.4	50.3	46.9	- 7
Michigan	67.2	114.2	72.8	38.9	45.2	48.2	119.3	93.3	-22
Minnesota	17.1	30.8	22.5	15.0	10.4	18.3	28.3	28.7	+ 1
Mississippi	3.9	4.1	3.5	3.0	2.5	3.6	7.7	6.1	-21
Missouri	20.2	29.9	19.4	15.3	16.7	18.6	37.7	35.4	- 6
Montana	1.2	3.2	2.3	.9	1.3	2.3	2.4	3.6	+50
Nebraska	4.9	8.7	5.6	2.6	2.4	4.7	8.0	7.1	-11
Nevada	3.1	3.0	3.7	2.3	3.6	3.0	6.9	6.6	- 4
New Hampshire	1.1	4.4	3.1	1.6	1.1	1.5	2.3	2.7	+17
New Jersey	65.4	73.6	54.1	55.6	40.3	50.4	114.2	90.7	-21
New Mexico	5.6	6.5	7.2	5.4	9.0	5.4	12.8	14.5	+13
New York	92.2	120.8	100.8	86.9	73.0	80.8	170.1	153.8	-10
North Carolina	19.7	16.7	14.9	11.9	16.1	15.2	35.1	31.3	-11
North Dakota .....	.4	3.5	1.8	.9	.3	.5	.8	.8	0
Ohio	63.8	111.1	78.8	53.5	52.6	70.0	129.4	122.7	- 5
Oklahoma	10.4	9.4	15.9	8.2	7.2	9.2	21.0	16.4	-22
Oregon	12.0	13.4	11.9	7.2	12.8	7.9	22.6	20.7	- 8
Pennsylvania	46.0	65.5	48.6	47.2	39.9	49.6	86.3	89.5	+ 4
Rhode Island	2.9	3.6	4.6	3.1	1.6	1.8	5.6	3.4	-39
South Carolina	9.0	6.8	4.7	5.3	4.9	4.7	14.9	9.6	-36
South Dakota	1.0	4.5	1.6	1.0	.9	1.0	3.2	1.9	-41
Tennessee	12.8	15.7	17.0	13.6	8.9	10.5	29.6	19.4	-34
Texas	82.3	76.1	64.9	56.1	98.2	77.1	169.6	175.2	+ 3
Utah	7.1	8.1	9.0	4.3	4.3	7.6	39.4	11.8	-70
Vermont .....	.1	.6	.6	.2	.2	.2	.5	.4	-20
Virginia	29.0	40.7	24.8	23.2	24.7	33.7	54.2	58.4	+ 8
Washington	20.3	24.8	25.7	20.7	22.2	24.7	43.3	46.9	+ 8
West Virginia	4.1	6.2	5.2	2.8	3.1	5.0	8.6	8.1	- 6
Wisconsin	22.9	40.9	34.0	18.8	18.7	26.0	41.7	44.6	+ 7
Wyoming	1.2	3.4	.8	1.9	.9	.8	2.5	1.7	-32

Source: Department of Labor.

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Table C-6: Building Permit Activity: Number of New Dwelling Units, by Metropolitan-Nonmetropolitan Location and by State

State	(Housekeeping units only)						First 2 months		Percent change, 1st 2 mos. 1956-57
	1956				1957		1956	1957	
	Feb.	Oct.	Nov.	Dec.	Jan.	Feb.	1956	1957	
ALL STATES	71,006	79,291	61,728	48,144	51,626	55,718	133,861	107,344	-20
Metropolitan areas	54,948	60,421	46,041	37,438	39,528	42,955	104,134	82,483	-21
Nonmetropolitan areas	16,058	18,870	15,687	10,706	12,098	12,763	29,727	24,861	-16
Alabama	887	882	942	733	958	865	1,957	1,823	-7
Arizona	958	1,146	1,198	821	1,399	1,096	1,934	2,495	+29
Arkansas	254	354	333	228	260	223	513	483	-6
California	16,298	14,218	12,622	10,294	12,945	12,906	30,731	25,851	-16
Colorado	1,008	1,225	910	962	906	919	2,159	1,825	-15
Connecticut	1,162	1,616	1,245	1,097	760	781	1,886	1,541	-18
Delaware	129	579	139	112	102	85	504	187	-63
District of Columbia	42	689	29	84	137	109	75	246	+228
Florida	4,979	5,626	4,864	4,112	4,920	4,610	9,623	9,530	-1
Georgia	1,538	1,173	1,023	780	1,147	1,020	2,971	2,167	-27
Idaho	39	201	115	55	50	53	100	103	+3
Illinois	3,654	4,891	3,537	3,349	2,363	3,412	6,980	5,775	-17
Indiana	1,004	1,690	1,343	848	724	795	1,966	1,519	-23
Iowa	368	513	485	268	191	242	649	433	-33
Kansas	719	709	553	317	321	482	1,376	803	-42
Kentucky	480	536	458	681	341	393	962	734	-24
Louisiana	772	982	701	651	812	1,206	1,651	2,018	+22
Maine	18	133	86	40	24	18	47	42	-11
Maryland	1,967	2,104	1,164	1,264	1,354	2,063	3,339	3,417	+2
Massachusetts	1,386	1,987	1,514	995	543	966	2,512	1,509	-40
Michigan	3,632	3,916	2,729	1,565	1,690	1,967	6,420	3,657	-43
Minnesota	548	1,339	995	508	284	399	1,101	683	-38
Mississippi	282	218	183	171	163	155	606	318	-48
Missouri	1,037	1,086	677	396	525	676	1,968	1,201	-39
Montana	65	130	126	42	55	31	113	86	-24
Nebraska	243	329	260	136	100	237	445	337	-24
Nevada	164	150	183	75	149	120	373	269	-28
New Hampshire	67	238	161	43	52	44	127	96	-24
New Jersey	4,332	4,081	2,795	2,302	1,883	2,154	6,476	4,037	-38
New Mexico	338	372	405	281	412	368	556	780	+40
New York	4,636	6,437	5,160	3,802	2,916	3,256	9,906	6,172	-38
North Carolina	1,158	651	702	502	707	710	2,023	1,417	-30
North Dakota	10	190	100	37	3	4	32	7	-78
Ohio	2,852	4,753	2,912	1,934	1,637	2,494	5,432	4,131	-24
Oklahoma	702	436	416	363	574	386	1,227	960	-22
Oregon	451	470	355	226	254	402	863	656	-24
Pennsylvania	1,866	2,196	2,158	1,618	1,530	1,314	3,410	2,844	-17
Rhode Island	193	270	252	130	66	111	327	177	-46
South Carolina	440	350	257	191	324	339	824	663	-20
South Dakota	43	130	85	49	32	22	85	54	-36
Tennessee	861	847	647	602	525	726	1,976	1,251	-37
Texas	4,213	3,503	2,690	2,405	4,254	3,997	8,479	8,251	-3
Utah	469	382	387	185	291	474	905	765	-15
Vermont	8	52	35	7	12	7	26	19	-27
Virginia	2,206	2,263	1,153	1,042	1,263	1,344	3,632	2,607	-28
Washington	1,050	1,142	1,043	743	805	678	2,017	1,483	-26
West Virginia	194	253	176	111	113	150	341	263	-23
Wisconsin	1,219	1,774	1,377	938	708	870	2,102	1,578	-25
Wyoming	65	79	48	49	42	39	134	81	-40

Source: Department of Labor.

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Table C-7: Building Permit Activity: Valuation, in Selected Metropolitan Areas

Metropolitan area	(Millions of dollars)								Percent change, 1st 2 mos. 1956-57
	1956				1957		First 2 months		
	Feb.	Oct.	Nov.	Dec.	Jan.	Feb.	1956	1957	
Atlanta, Ga.	11.0	12.1	9.7	7.5	10.8	13.5	22.3	24.3	+ 9
Baltimore, Md.	19.0	19.7	17.4	17.5	14.5	27.0	33.0	41.5	+26
Birmingham, Ala.	4.7	5.3	6.3	5.0	6.2	4.5	10.6	10.8	+ 2
Boston, Mass.	15.5	23.0	24.3	14.1	10.8	19.8	27.6	30.6	+11
Buffalo, N. Y.	6.5	20.5	10.0	6.1	6.0	9.0	14.3	15.0	+ 5
Chicago, Ill.	78.2	103.8	86.5	67.8	63.7	84.4	151.5	148.1	- 2
Cleveland, Ohio	22.8	34.2	23.1	13.9	12.0	22.3	42.8	34.3	-20
Columbus, Ohio	7.3	13.2	7.2	7.1	4.5	9.6	18.1	14.2	-22
Denver, Colo.	16.7	20.9	11.3	8.8	14.8	11.8	28.5	26.6	- 7
Detroit, Mich.	49.7	80.1	38.4	23.7	29.2	33.6	87.3	62.8	-28
Indianapolis, Ind.	10.4	15.3	8.8	4.6	6.2	8.1	14.9	14.3	- 4
Los Angeles, Calif.	128.9	126.0	117.8	103.3	109.0	108.4	269.0	217.4	-19
Miami, Fla.	16.6	25.7	16.7	16.9	22.5	22.8	35.2	45.3	+29
Milwaukee, Wis.	11.1	15.1	12.2	8.7	8.6	17.4	20.1	26.1	+30
New York-Northeastern New Jersey	110.1	122.8	104.9	105.4	79.0	86.4	203.1	165.4	-19
Norfolk-Portsmouth, Va.	3.9	8.2	4.3	2.7	3.8	4.4	7.1	8.3	+17
Philadelphia, Pa.	34.7	46.5	28.5	31.6	25.8	37.8	60.2	63.5	+ 5
Phoenix, Ariz.	12.8	13.5	10.8	8.5	10.3	9.9	20.2	20.2	0
Rochester, N. Y.	3.0	5.6	4.6	3.0	2.9	3.2	5.7	6.2	+ 9
Salt Lake City, Utah	4.6	4.9	4.7	2.6	3.0	3.8	8.9	6.8	-24
San Diego, Calif.	13.4	27.2	18.2	18.0	22.0	14.1	22.8	36.1	+58
San Francisco-Oakland, Calif.	38.6	37.3	35.4	27.1	30.3	27.2	68.7	57.4	-16
Seattle, Wash.	10.2	11.6	11.1	9.4	12.3	12.5	19.5	24.9	+28
Washington, D. C.	21.1	36.1	16.6	12.3	16.4	18.5	43.4	35.0	-19

Source: Department of Labor.

Table C-8: Building Permit Activity: Number of New Dwelling Units, in Selected Metropolitan Areas

Metropolitan area	(Housekeeping only)						First 2 months		Percent change, 1st 2 mos. 1956-57
	1956				1957				
	Feb.	Oct.	Nov.	Dec.	Jan.	Feb.	1956	1957	
Atlanta, Ga.	861	666	656	427	677	547	1,608	1,224	-24
Baltimore, Md.	1,091	1,230	654	771	829	1,493	1,716	2,322	+35
Birmingham, Ala.	300	247	274	247	347	287	694	634	- 9
Boston, Mass.	745	975	683	525	258	550	1,243	808	-35
Buffalo, N. Y.	376	1,339	491	264	302	238	793	540	-32
Chicago, Ill.	3,275	4,267	3,075	3,091	2,161	3,025	6,285	5,186	-17
Cleveland, Ohio	806	981	688	404	355	602	1,528	957	-37
Columbus, Ohio	347	864	380	351	244	367	907	611	-33
Denver, Colo.	656	811	531	613	638	554	1,432	1,192	-17
Detroit, Mich.	2,682	2,451	1,731	809	945	1,240	4,513	2,185	-52
Indianapolis, Ind.	284	511	500	301	196	255	506	451	-11
Los Angeles, Calif.	8,536	7,236	6,031	5,244	6,501	6,551	17,630	13,052	-26
Miami, Fla.	1,209	1,735	1,262	1,166	1,419	1,282	2,613	2,701	+ 3
Milwaukee, Wis.	606	691	650	538	431	515	1,066	946	-11
New York-Northeastern New Jersey	5,545	6,483	5,306	4,473	3,236	3,643	10,918	6,879	-37
Norfolk-Portsmouth, Va.	270	407	219	199	131	177	495	308	-38
Philadelphia, Pa.	2,199	1,547	1,437	943	1,253	929	3,320	2,182	-34
Phoenix, Ariz.	699	892	840	620	992	858	1,352	1,850	+37
Rochester, N. Y.	176	229	189	115	144	123	347	267	-23
Salt Lake City, Utah	359	175	254	101	203	189	611	392	-36
San Diego, Calif.	1,115	1,290	1,407	1,117	1,119	1,125	1,806	2,244	+24
San Francisco-Oakland, Calif.	1,882	1,752	1,271	1,095	1,201	1,235	3,099	2,436	-21
Seattle, Wash.	637	476	428	442	543	368	1,122	911	-19
Washington, D. C.	1,140	1,565	515	551	715	829	2,062	1,544	-25

Source: Department of Labor.

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Table C-9: Building Permit Activity: Valuation in Selected Metropolitan Areas
by Type of Building Construction

February 1957 (Thousands of dollars)

Type of building construction	Atlanta, Ga.	Baltimore, Md.	Birmingham, Ala.	Boston, Mass.	Buffalo, N. Y.	Chicago, Ill.	Cleveland, Ohio	Columbus, Ohio
All building construction ¹	13,547	27,030	4,529	19,814	9,022	84,426	22,310	9,635
New dwelling units ²	5,552	16,805	2,374	6,644	2,645	39,101	9,447	4,990
New nonresidential building	6,835	7,065	1,503	11,695	5,064	39,407	11,196	3,890
Commercial buildings	1,919	1,765	718	2,319	894	13,394	1,246	341
Amusement buildings	2	154	5	63	1	143	90	0
Commercial garages	3	0	0	172	0	13	9	6
Gasoline and service stations	218	127	71	55	96	529	150	211
Office buildings	134	195	116	848	260	10,664	646	7
Stores and other mercantile bldgs.	1,563	1,288	527	1,182	537	2,046	352	117
Community buildings	3,472	4,148	638	2,497	199	15,481	3,782	538
Educational buildings	3,158	4,028	129	2,497	0	4,845	2,479	538
Institutional buildings	0	0	0	0	0	8,338	508	0
Religious buildings	314	120	509	0	199	2,298	795	0
Garages, private residential	17	23	31	39	66	617	106	109
Industrial buildings	1,244	256	101	6,275	900	6,024	2,132	404
Public buildings	0	588	0	0	50	0	0	234
Public utilities buildings	111	237	0	550	1,903	3,507	3,867	2,240
All other nonresidential buildings	72	48	15	15	1,053	383	63	26
Additions, alterations, and repairs	1,159	3,160	651	1,472	1,313	5,480	1,641	755
	Denver, Colo.	Detroit, Mich.	Indianapolis, Ind.	Los Angeles, Calif.	Miami, Fla.	Milwaukee, Wis.	New York-Northeastern New Jersey	Norfolk-Portsmouth, Va.
All building construction ¹	11,796	33,564	8,097	108,384	22,838	17,437	86,390	4,432
New dwelling units ²	5,504	15,928	2,892	62,541	11,599	5,936	40,602	773
New nonresidential building	5,418	13,142	4,296	31,718	4,646	10,552	38,550	2,935
Commercial buildings	969	2,830	3,489	12,740	2,164	621	4,594	198
Amusement buildings	288	329	0	657	179	155	415	17
Commercial garages	0	0	0	1,276	32	0	335	0
Gasoline and service stations	190	342	111	368	201	30	501	50
Office buildings	286	1,027	1,365	2,771	810	365	1,096	0
Stores and other mercantile bldgs.	205	1,131	2,013	7,669	942	72	2,248	131
Community buildings	2,210	6,648	578	6,116	1,213	0	14,151	0
Educational buildings	2,096	3,559	323	2,778	1,104	0	11,169	0
Institutional buildings	0	2,006	0	1,587	86	0	1,891	0
Religious buildings	114	1,084	255	1,752	24	0	1,091	0
Garages, private residential	132	230	68	782	61	56	324	38
Industrial buildings	1,940	1,385	119	7,673	615	2,245	4,535	96
Public buildings	35	318	28	89	21	7,622	12,627	2,588
Public utilities buildings	0	1,349	6	1,021	35	3	1,953	0
All other nonresidential buildings	132	381	9	3,296	538	3	366	15
Additions, alterations, and repairs	824	4,494	809	13,415	2,193	950	7,064	724
	Philadel- phia, Pa.	Phoenix, Ariz.	Rochester, N. Y.	Salt Lake City, Utah	San Diego, Calif.	San Francisco- Oakland, Calif.	Seattle, Wash.	Washington, D. C.
All building construction ¹	37,761	9,911	3,248	3,771	14,133	27,157	12,513	18,534
New dwelling units ²	12,418	7,538	1,652	2,498	10,726	12,528	4,619	8,945
New nonresidential building	21,578	1,605	1,103	817	2,325	10,672	6,702	6,863
Commercial buildings	2,602	765	191	394	567	2,186	617	1,426
Amusement buildings	71	1	25	0	18	68	10	56
Commercial garages	318	9	43	0	37	19	62	0
Gasoline and service stations	297	84	38	43	67	192	129	92
Office buildings	824	477	0	47	170	649	215	50
Stores and other mercantile bldgs.	1,092	195	86	304	275	1,259	201	1,229
Community buildings	2,437	119	836	248	839	3,814	4,857	2,040
Educational buildings	1,612	0	836	0	812	3,135	1,887	1,629
Institutional buildings	307	22	0	0	0	0	2,520	0
Religious buildings	519	97	0	248	28	679	450	411
Garages, private residential	136	10	23	37	190	109	36	31
Industrial buildings	1,738	662	52	122	561	2,278	598	2,555
Public buildings	0	32	0	0	38	843	366	125
Public utilities buildings	14,312	0	0	0	8	562	127	292
All other nonresidential buildings	354	16	1	17	120	881	102	393
Additions, alterations, and repairs	3,658	729	493	455	1,045	3,956	1,183	2,727

Source: Department of Labor.

¹ Includes new nonhousekeeping residential building, not shown separately.² Housekeeping only.

Part D--Contracts

37

NOTE: Tables D-1 and D-2 include revisions for the periods shown (except March 1957). Revisions for months not given here will appear in the forthcoming supplement, Construction Volume and Costs--A Supplement to Construction Review.

Table D-1: Contract Awards: Public Construction, by Ownership and Type of Construction¹

Ownership and type of construction ²	Value (in millions of dollars)						Percent change, 1st 3 mos. 1956-57	Value (in millions of dollars)				
	1956		1957		First 3 months			Year				
	Mar.	Jan.	Feb.	Mar.	1956	1957		1952	1953	1954	1955	1956
Total public construction..	890.0	920.3	768.0	1,104.1	2,345.6	2,792.4	+19	8,924.4	8,472.3	8,254.4	9,000.5	10,372.2
Federally owned	191.3	207.2	217.2	342.1	425.5	766.5	+80	3,578.5	2,154.2	1,371.1	1,556.0	2,037.4
Residential buildings	20.1	30.2	19.3	115.4	35.8	164.9	(3)	11.0	15.0	3.9	61.4	128.1
Nonresidential bldgs.	88.3	86.7	67.2	71.0	176.4	224.9	+27	2,377.3	1,525.2	811.4	885.5	909.4
Educational	3.0	20.5	1.5	4.0	3.2	26.0	(3)	44.2	13.4	14.9	21.6	23.7
Hospital & institutional ..	4.5	16.1	2.0	4.6	10.3	22.7	+120	53.2	29.7	72.9	77.5	43.9
Administrative & service ..	8.4	4.5	1.5	3.5	15.4	9.5	-38	43.4	45.7	38.8	66.7	87.3
Other nonres. bldgs.	72.4	45.6	62.2	58.9	147.5	166.7	+13	2,236.5	1,436.4	684.8	719.7	754.5
Airfield bldgs.	8.4	5.6	9.3	11.6	27.5	26.5	-4	66.8	71.9	90.9	103.8	72.1
Troop housing	1.6	5.6	16.4	7.7	21.5	29.7	+38	286.4	60.7	68.7	54.1	122.7
Warehouses	2.5	3.5	5.8	4.0	5.0	13.3	+166	279.9	64.7	82.3	84.0	63.2
All other	59.9	30.9	30.7	35.6	93.5	97.2	+4	1,603.4	1,239.1	442.9	477.8	496.5
Airfields	7.5	7.9	27.0	49.7	40.0	84.6	+112	117.3	103.9	153.1	157.4	155.7
Conservation & developm't ..	66.9	50.2	49.7	83.1	137.2	183.0	+33	292.0	225.5	207.4	271.9	511.0
Highways	2.9	9.3	3.4	4.1	13.5	16.8	+24	89.5	52.9	62.2	58.5	91.9
Electric power	2.1	7.9	25.6	2.9	9.6	36.4	+279	517.7	156.8	66.8	43.5	177.5
All other federal	3.5	15.0	25.0	15.9	13.0	55.9	(3)	173.7	74.9	66.3	77.8	63.8
State and locally owned	698.7	713.1	550.8	762.0	1,920.1	2,025.9	+6	5,345.9	6,318.1	6,883.3	7,444.5	8,334.8
Residential bldgs.	38.8	21.8	31.4	7.4	71.3	60.6	-15	613.3	331.5	254.6	210.1	253.2
Nonresidential bldgs.	278.5	252.8	256.1	300.8	719.1	809.7	+13	1,948.0	2,259.9	2,865.9	2,842.0	3,202.8
Educational	215.4	184.9	175.9	234.9	553.3	595.7	+8	1,350.9	1,629.3	2,077.9	2,107.2	2,289.0
Hospital & institutional ..	11.5	12.6	27.4	15.8	56.1	55.8	-1	279.4	237.3	241.6	185.9	278.9
Administrative & service ..	32.6	23.3	29.2	25.0	60.3	77.5	+29	168.2	147.8	253.5	263.0	320.8
Other nonres. bldgs.	19.0	32.0	23.6	25.1	49.4	80.7	+63	149.5	245.5	292.9	285.9	314.1
Highways	279.0	317.1	186.2	349.6	759.6	852.9	+12	1,997.9	2,659.7	2,684.7	2,933.5	3,211.6
Sewer & water systems	73.5	68.9	55.4	75.4	274.4	199.7	-27	588.7	755.5	765.4	895.5	1,100.0
Sewer	42.9	37.3	16.6	43.6	188.0	97.5	-48	362.1	472.8	472.7	501.9	658.9
Water	30.6	31.6	38.8	31.8	86.4	102.2	+18	226.6	282.7	292.7	393.6	441.1
Public service enterprises ..	8.0	33.1	11.7	17.4	39.4	62.2	+58	115.8	155.5	172.3	378.0	336.5
Electric power	2.6	17.1	8.2	7.7	23.7	33.0	+39	51.5	72.4	105.3	247.4	227.2
Other	5.4	16.0	3.5	9.7	15.7	29.2	+86	64.3	83.1	67.0	130.6	109.3
Conservation & developm't ..	9.0	12.0	5.1	4.5	34.3	21.6	-37	40.2	65.5	67.1	117.2	139.3
All other State and local....	11.9	7.4	4.9	6.9	22.0	19.2	-13	42.0	90.5	73.3	68.2	91.4

Source: Departments of Commerce and Labor. ¹ Includes major force-account projects started, principally by TVA and State highway departments. ² Types not shown separately are included in the appropriate "other" category. ³ Percent increase exceeds 300.

Table D-2: Contract Awards: Highway Construction, by Ownership, Source of Funds, and Type of Facility¹

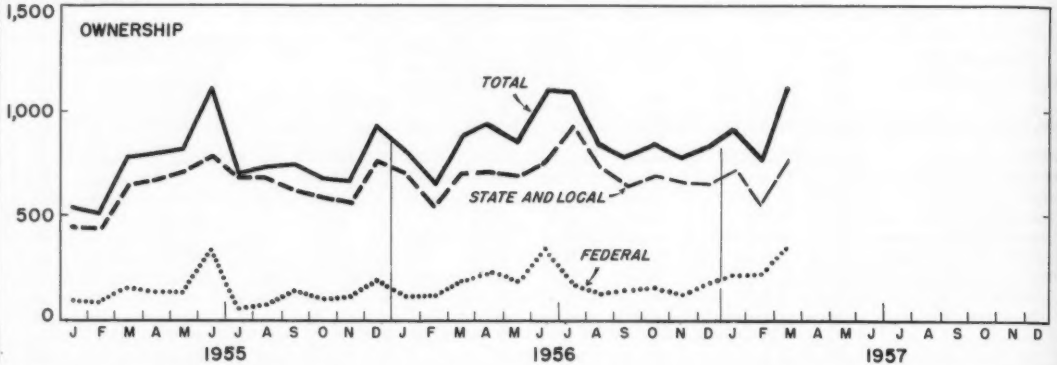
Ownership, source of funds, and type of facility	Value (in millions of dollars)						Percent change, 1st 3 mos. 1956-57	Value (in millions of dollars)				
	1956		1957		First 3 months			Year				
	Mar.	Jan.	Feb.	Mar.	1956	1957		1952	1953	1954	1955	1956
All highway construction ..	281.9	326.4	189.6	353.7	773.1	869.7	+12	2,087.4	2,712.6	2,746.9	2,992.0	3,303.5
Federally owned	2.9	9.3	3.4	4.1	13.5	16.8	+24	89.5	52.9	62.2	58.5	91.9
State owned	254.8	292.1	167.5	320.7	701.9	780.3	+11	1,653.7	2,286.5	2,300.4	2,559.8	2,718.3
Federally aided projects:												
Total value.....	127.8	205.8	130.7	173.4	388.0	509.9	+31	911.2	997.6	1,218.4	1,256.1	1,737.2
Federal funds	70.3	135.8	83.7	113.5	201.3	333.0	+65	475.9	519.1	629.5	667.4	962.8
Independent State projects:												
Total value	127.0	86.3	36.8	147.3	313.9	270.4	-14	742.5	1,288.9	1,082.0	1,303.7	981.1
Toll facilities	76.4	41.6	3.1	97.8	182.8	142.5	-22	146.4	799.7	458.9	694.9	336.7
Locally owned ²	24.2	25.0	18.7	28.9	57.7	72.6	+26	344.2	373.2	384.3	373.7	493.3

Source: Departments of Commerce and Labor. ¹ Includes force-account work started on Federal and State projects. ² By municipalities and counties.

Chart 7.

Contracts Awarded on Public Construction

Millions of Dollars



SOURCE: DEPARTMENT OF COMMERCE AND LABOR.

CONSTRUCTION REVIEW C.D. 57-10-G

Table D-3: Value of Construction Contracts Reported by the F. W. Dodge Corporation

Type of construction	Value (in millions of dollars)			Percent change first 4 months 1956-57
	April 1957	First 4 months		
		1957	1956	
TOTAL	2, 776	10, 315	10, 266	(1)
Building construction	2, 070	7, 696	7, 934	- 3
Residential.....	1, 232	4, 031	4, 285	- 6
Nonresidential	838	3, 665	3, 649	(1)
Engineering	706	2, 619	2, 332	+12
Public works.....	453	1, 666	1, 759	- 5
Utilities.....	253	953	573	+66

Source: Table compiled by Department of Commerce from data published by the F. W. Dodge Corporation. ¹Change of less than one-half of 1 percent.

Table D-4: Value of Construction Contract Awards Reported by the Engineering News-Record

Ownership and type of construction	Value (in millions of dollars)			Percent change
	May 1957 ¹	12 months ending--		12 months ending in May, 1956-57
		May 1957	May 1956	
TOTAL	1,857	19,855	20,597	- 4
Privately owned.....	803	10,874	12,954	-16
Publicly owned	1,054	8,981	7,643	+18
Private industrial buildings	290	4,237	4,414	- 4
Buildings, except private industrial	754	8,571	9,814	-13
Highways and bridges.....	349	3,373	2,892	+17
Sewer systems	53	496	508	- 2
Water systems	77	412	334	+23
Unclassified and all other	334	2,766	2,635	+ 5

Source: Table compiled by Department of Commerce from data published by the Engineering News-Record. Data include only those projects with contract values above the following minimum sizes: Water supply, earthwork, and waterways--\$44,000; other public works--\$73,000; industrial buildings--\$93,000; other buildings--\$344,000. ¹Five weeks.

Part E--Costs

39

NOTE: Some of the cost indexes appearing in Table E-1, beginning with this issue, are in terms of the same number of significant places as the original base data, after converting to a 1947-49 base. This differs from the previous practice of showing all indexes to one decimal place.

Table E-1: Construction Cost Indexes

Compiler and coverage	Indexes (1947-49 = 100)									Percent change, Apr. 1956-57
	1956		1957				1954	1955	1956	
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Apr.	Apr.	Apr.	
American Appraisal Company	137	138	138	139	139	139	124	128	134	+ 4
Associated General Contractors	145	145	146	146	146	146	131	134	140	+ 4
E. H. Boeckh and Associates (20 city average):										
Residences	130.3	130.4	130.5	130.6	130.7	130.9	119.1	122.6	128.9	+ 2
Apartments, hotels, and office buildings	138.7	138.9	139.2	139.4	139.5	139.8	125.6	128.9	135.7	+ 3
Commercial and factory buildings	140.7	140.9	141.2	141.6	141.7	142.0	126.4	130.0	137.3	+ 3
Engineering News-Record (as of May 1):										
Building	147.9	148.5	149.1	148.3	148.3	148.8	129.6	136.8	144.1	+ 3
Construction	155.4	156.3	157.1	156.4	156.6	158.0	136.6	144.2	152.0	+ 4
Department of Commerce composite ¹	134	134	134	135	135	135	120	123	130	+ 4

Source: Department of Commerce.

¹ A composite of cost indexes representative of the major types of construction, weighted by the current relative importance of each type.

Table E-2: Indexes of Wholesale Prices of Building Materials, by Selected Classes

Commodity	Indexes (1947-49 = 100)									Percent change, Apr. 1956-57
	1956		1957				1954	1955	1956	
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Apr.	Apr.	Apr.	
ALL BUILDING MATERIALS ¹	130.8	130.5	130.5	130.5	130.5	130.7	119.0	123.4	131.3	- 1
LUMBER AND WOOD PRODUCTS:										
Lumber	123.1	122.5	122.6	121.9	121.2	121.2	115.3	122.9	130.6	- 7
Douglas fir	122.0	120.0	121.2	120.3	119.6	119.8	113.4	128.5	136.0	-12
Southern pine	118.8	119.0	117.8	116.1	115.5	115.1	108.4	113.9	120.6	- 5
Other softwoods	133.0	133.0	133.5	133.7	133.3	134.0	130.2	136.8	140.8	- 5
Hardwoods	123.2	123.1	122.3	121.8	120.6	120.3	112.5	115.7	128.2	- 6
Millwork	128.5	128.5	128.7	128.7	128.7	128.3	130.8	129.3	128.9	- 1
Plywood	94.8	94.6	97.1	96.4	96.2	96.7	100.7	104.8	106.9	-10
Softwood	87.7	87.3	92.1	91.6	91.1	92.1	98.9	110.5	111.4	-17
Hardwood	104.2	104.2	104.2	103.4	103.4	103.4	101.9	100.9	104.4	- 1
PAINT AND PAINT MATERIALS:										
Prepared paint	123.6	124.1	124.1	124.1	124.1	124.1	112.8	114.8	119.1	+ 4
Paint materials	99.4	99.5	99.0	100.6	100.1	99.8	94.7	96.2	101.6	- 2
METAL PRODUCTS:										
Structural shapes	170.5	170.5	179.1	183.4	183.4	183.4	141.3	146.2	157.5	+16
Hardware, finish	150.2	150.2	151.2	151.2	150.8	153.7	137.5	139.9	147.2	+ 4
Plumbing equipment	133.9	133.9	133.4	133.4	132.0	131.6	118.2	123.3	133.9	- 2
Enameled iron fixtures	125.3	125.3	125.3	125.3	125.9	127.7	129.2	129.3	125.3	+ 2
Vitreous china fixtures	124.2	124.1	124.1	124.1	124.2	124.2	111.7	117.3	124.2	0
Brass fittings	142.6	142.6	142.6	142.6	139.9	138.5	115.9	123.4	141.9	- 2
Heating equipment	122.0	122.1	122.3	122.8	121.6	121.6	114.5	113.6	117.3	+ 4
Furnaces	130.3	130.6	129.8	130.4	127.1	127.2	120.4	119.8	123.8	+ 3
Water heaters	108.4	107.9	109.1	109.1	109.1	109.0	108.2	107.4	107.1	+ 2
Metal sash	148.3	148.3	139.4	138.1	138.1	138.1	127.3	133.2	146.3	- 6
NONMETALLIC MINERAL PRODUCTS:										
Glass, plate	145.7	145.7	145.7	145.7	145.7	145.7	132.0	132.0	137.5	+ 6
Glass, window	145.9	145.9	145.9	145.9	145.9	145.9	131.3	135.1	138.8	+ 5
Concrete ingredients	131.6	131.7	134.6	134.8	135.1	135.7	119.8	124.8	130.0	+ 4
Portland cement	141.4	141.4	145.9	145.9	145.9	147.2	124.9	131.5	138.9	+ 6
Concrete products	125.3	125.3	125.6	125.6	125.7	126.0	117.3	118.2	121.7	+ 4
Structural clay products	150.3	150.5	150.6	150.7	150.8	155.0	132.0	136.8	146.0	+ 6
Gypsum products	127.1	127.1	127.1	127.1	127.1	127.1	122.1	122.1	127.1	0
Asphalt roofing	114.4	114.4	111.2	115.3	118.2	121.6	108.4	98.5	111.9	+ 9
Insulation materials	100.3	100.3	100.3	100.3	103.1	103.1	110.1	106.7	101.9	+ 1
MISCELLANEOUS PRODUCTS:										
Building board	138.1	138.1	141.1	141.1	141.1	141.7	127.9	129.7	138.1	+ 3
Kitchen cabinets, metal	142.0	142.0	142.0	142.0	142.0	142.0	127.5	128.2	136.5	+ 4

Source: Department of Labor.

¹ Includes items not shown separately.

Table E-3: Wholesale Prices of Selected Building Materials

Commodity	Unit	1957		1956
		Mar.	Feb.	Mar.
LUMBER				
Douglas fir:				
Dimension, construction, 25% No. 2, green, S4S, 2"x4", R.L., mixed c/l, f.o.b. mill.....	M bd. ft.	\$65.723	\$65.604	\$78.351
Boards, construction, 25% No. 2, green, S4S, R.L., 1"x8", loose, mixed c/l of boards and dimension, f.o.b. mill.....	M bd. ft.	59.796	60.123	71.373
Timbers, construction, 8"x8" to 12"x12", R.L., green f.o.b. mill.....	M bd. ft.	76.062	76.622	85.856
Southern pine:				
Dimension, No. 2 and better, 2"x4"x16', dry, S.L., S4S, f.o.b. mill.....	M bd. ft.	85.520	86.071	85.520
Boards, No. 2 and better, 1"x6", dry, R.L., S4S, f.o.b. mill.....	M bd. ft.	78.135	78.395	84.079
Ponderosa pine boards, No. 3 common, 1"x8", R.L., S2 or 4S, c/l or mixed cars, f.o.b. mill.....	M bd. ft.	73.380	73.380	82.310
Oak, red, flooring, plain, 25/32" thick, 2-1/4" face, select, f.o.b. mill.....	M bd. ft.	171.112	175.747	199.043
Maple flooring 2d grade, 25/32" x2-1/4" face, f.o.b. mill.....	M bd. ft.	213.366	211.890	191.968
Poplar, plain, No. 2B common, 4/4", R.W., f.o.b. mill.....	M bd. ft.	60.000	60.000	58.000
Beech, No. 2 common, 4/4", R.W. & L., f.o.b. mill.....	M bd. ft.	56.000	56.000	54.000
MILLWORK				
Door, flush type, interior, hardwood face, premium grade, 2'6"x6'8"x1-3/8", f.o.b. factory, carlot freight allowed, zone 1.....	Each	8.009	8.009	(1)
Door frame, ponderosa pine, exterior, 1-5/16"x2" casing, with sill, f.o.b. factory.....	Each	9.418	9.418	9.372
Window, ponderosa pine, 2-light, check rail, open, f.o.b. factory.....	Each	1.673	1.673	1.681
PLYWOOD				
Douglas fir, interior, grade A-D, 1/4"x48"x96", f.o.b. mill.....	M sq. ft.	68.448	68.448	84.279
Douglas fir, interior, grade C-D, 5/16"x48"x96", f.o.b. mill.....	M sq. ft.	53.237	54.208	66.177
BOARD				
Insulation, fiber, 1/2"x48"x96", interior, f.o.b. plant, freight equalized.....	M sq. ft.	58.500	58.500	55.500
PREPARED PAINT				
Emulsion, water-thinned, inside, delivered.....	Gallon	2.657	2.657	2.510
Varnish, floor, first grade, delivered.....	Gallon	4.002	4.007	3.874
Enamel, white, gloss, first grade, delivered.....	Gallon	4.980	4.986	4.802
Inside, flat, white, first grade, delivered.....	Gallon	3.264	3.269	3.116
Outside, white, first grade, delivered.....	Gallon	4.656	4.662	4.477
METAL PRODUCTS				
Structural shapes, carbon steel, 6"x4"x1/2" angles, 30' long, ASTM spec. A-7, base quantity, f.o.b. mill.....	100 lb.	5.667	5.667	4.867
Bars, reinforcing, carbon steel, 3/4" rounds x 30' long with 10% shorts, spec. ASTM A-15, 50T, base quantity, f.o.b. mill.....	100 lb.	5.788	5.788	5.313
Sheets, galvanized, carbon steel, 24 gage x 30" wide x 96" long, commercial coating, base chemistry, base packaging, base quantity, f.o.b. mill.....	100 lb.	8.220	8.220	7.770
Pipe, standard, black, carbon steel, butt weld, threaded and coupled, 1-1/4" nominal, random lengths, wt. 228 lbs., f.o.b. mill.....	100 ft.	18.894	18.791	16.997
Pipe, standard, galvanized, carbon steel, butt weld, threaded and coupled, 1-1/4" nominal, random lengths, wt. 228 lbs., f.o.b. mill.....	100 ft.	23.034	22.931	21.137
Nails, wire, carbon steel, 8-penny, common, c/l, f.o.b. mill.....	100 lb. keg	9.365	9.365	8.603
Soil pipe, cast iron, 2" to 6", single and double hub, service pipe, extra heavy, f.o.b. foundry, index number (1947-49 = 100).....	Ton	(116.2)	(116.2)	(111.3)
Aluminum sheets, 3003-H14, hard alloy, mill finish, 0.64"x48"x144", 30,000 lbs. or over, f.o.b. shipping point, freight allowed.....	Pound	\$0.427	\$0.427	\$0.393
Copper water tubing, type L, 3/4" size, 0.045" thick, 2,000 ft. or more in 60' coils (0.455 lbs. per linear ft.), f.o.b. mill, freight allowed.....	Foot	.287	.296	.343
Wire, building, type R, size 12, single braid, f.o.b. destination, or freight prepaid on specified amounts.....	M ft.	19.600	19.092	19.040
Screening, insect, bronze wire, 18x14 mesh, 30" wide, c/l, f.o.b. factory.....	Linear ft. roll	30.680	30.680	30.780
PLUMBING EQUIPMENT				
Bath tub, enameled iron, 5', recessed, f.o.b. factory, freight allowed.....	Each	55.546	55.113	55.113
Lavatory, enameled iron, 20"x18", f.o.b. plant, freight allowed.....	Each	13.497	13.497	13.497
Water closet, vitreous china, close coupled, reverse trap, f.o.b. plant, freight allowed.....	Each	24.684	24.663	24.661
Sink, enameled steel, 32"x21", flat rim, 2-compartment, acid resisting, without drainboard, f.o.b. plant, freight allowed.....	Each	14.174	14.174	16.634

See footnotes at end of table.

Table E-3: Wholesale Prices of Selected Building Materials--Continued

Commodity	Unit	1957		1956
		Mar.	Feb.	Mar.
HEATING EQUIPMENT				
Boiler, heating, steel, oil fired, steam rating 400 sq. ft., less burner, with jacket and standard trim, f.o.b. factory, freight allowed	Each	\$196.797	\$193.570	\$120.342
Convactor, nonferrous, free standing, average steam rating 43 sq. ft., E.D.R., f.o.b. factory, freight allowance	Sq. ft., incl. enclosure	.458	.458	.441
Furnace, warm air:				
Steel, oil fired, forced air, gun-type burner, average bonnet output 90,000-115,000 BTU per hr., f.o.b. factory, freight allowance	Each	251.881	251.881	239.662
Steel, gas fired, standard automatic controls, average input rating 85,000-110,000 BTU per hr., enclosing jacket, f.o.b. factory, freight allowance	Each	168.302	173.723	165.998
Furnace, floor, gas fired, floor grill, average input rating 40,000-60,000 BTU per hr., manual controls, f.o.b. factory	Each	57.541	57.541	57.217
Oil burner, mechanical forced draft (gun-type) 2-1/2 gal. per hr., thermostat, limit and stack controls, f.o.b. factory	Each	107.171	107.171	100.961
Water heater, gas, automatic, 30-gal. storage tank, galvanized steel, 1-year guarantee, f.o.b. factory, freight allowed	Each	41.640	41.640	39.092
NONMETALLIC MINERAL PRODUCTS				
Sand, construction, f.o.b. plant	Ton	1.265	1.263	1.224
Gravel, for concrete, 1-1/2" maximum, f.o.b. plant	Ton	1.557	1.557	1.506
Crushed stone, for concrete, 1-1/2" maximum, f.o.b. plant	Ton	1.650	1.637	1.613
Block, concrete, lightweight aggregate, 8"x8"x16", f.o.b. plant	Each	.183	.183	.178
Pipe, concrete, culvert, reinforced, 24" diameter, ASTM spec. C76-41 table 1, 3" wall thickness, 3'-8' lengths, delivered	Foot	4.122	4.122	3.910
Brick, building, f.o.b. plant	Thousand	30.814	30.814	30.398
Brick, face, red, first quality, textured, f.o.b. plant	Thousand	39.998	39.998	38.915
Tile, clay, partition, scored, 4"x12"x12", 3-cell, 16 lbs., f.o.b. plant	Thousand	134.556	134.556	134.556
Sewer pipe, vitrified clay, 8" diameter, 3' lengths, standard strength, f.o.b. plant	Foot	.544	.539	.520
Lath, gypsum, 3/8"x16"x48", f.o.b. plant, freight equalized	M sq. ft.	25.034	25.034	24.990
Wallboard, gypsum, 3/8"x48", varying lengths, f.o.b. plant, freight equalized	M sq. ft.	32.830	32.830	32.830
Plaster, gypsum, base coat, f.o.b. plant, freight equalized	Ton	15.928	15.928	15.928
Shingles, asphalt, strip, 210 lbs., f.o.b. factory, freight allowance	Square	5.929	5.770	5.337
Lime, hydrated, building, finishing, f.o.b. plant	Ton	21.600	21.378	20.194
Siding shingles, asbestos cement, f.o.b. plant, freight equalized	Square	11.341	11.341	10.653

Source: Department of Labor.

¹ Not available.

(NOTE: Tables E-4 and E-5, Union Wage Scales in the Building Trades, are shown quarterly in the February, May, August, and November issues.)

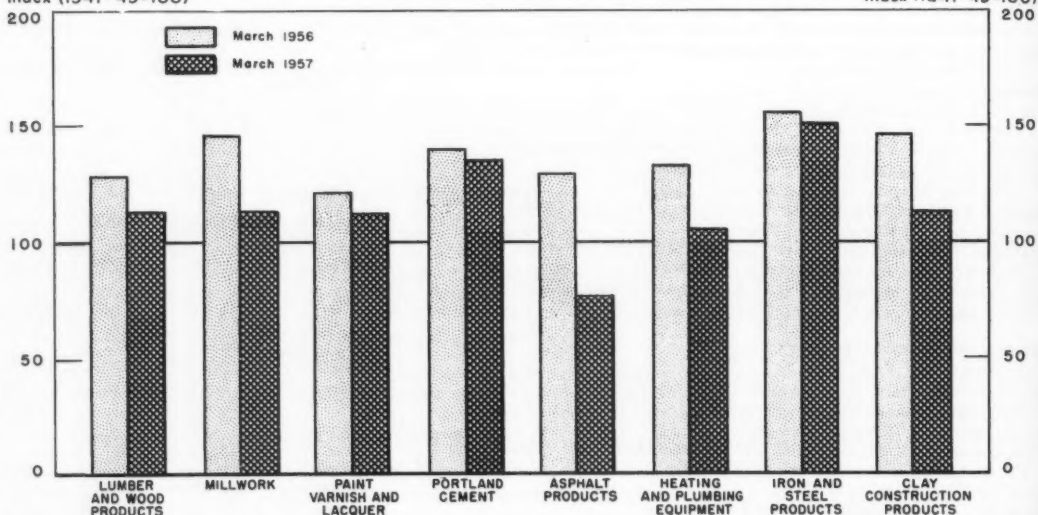
Part F--Materials Output

Chart 8

Indexes of Materials Output
Selected Groups of Construction Materials

Index (1947-49=100)

Index (1947-49=100)



SOURCE: DEPARTMENT OF COMMERCE.

CONSTRUCTION REVIEW C. D. 57-10-H

Table F-1: Construction Materials: Indexes of Output

(Monthly average 1947-49 = 100)

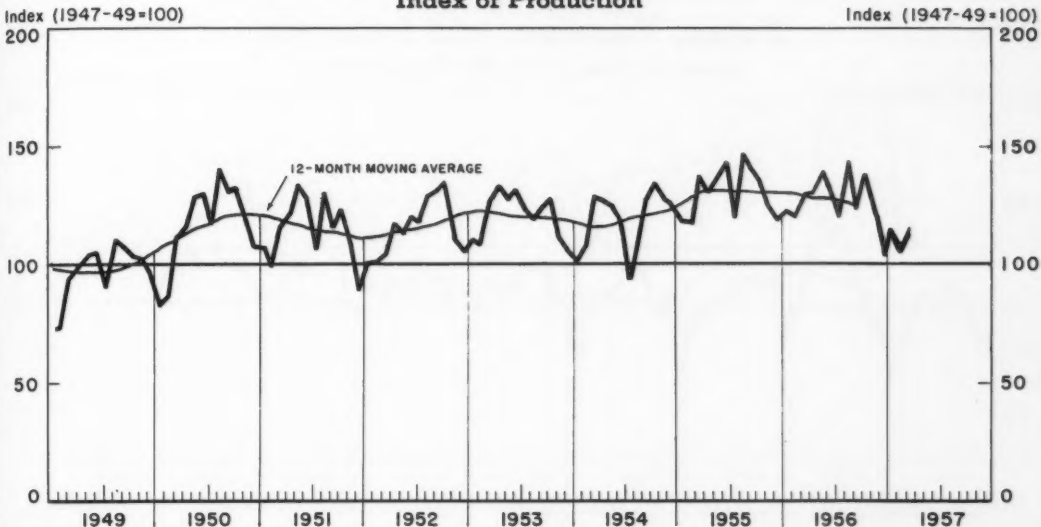
Materials group	Monthly Indexes												
	1956										1957		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Lumber and wood products...	129.0	129.3	138.6	130.0	119.8	143.1	123.6	138.4	120.5	103.1	113.8	106.1	113.8
Millwork	146.5	144.8	145.1	139.5	115.9	159.5	136.8	145.9	122.4	96.0	107.4	116.1	113.0
Paint, varnish, and lacquer	120.4	117.9	129.3	124.4	117.5	129.8	113.6	125.5	109.8	91.3	112.6	127.4	112.0
Portland cement	139.9	156.3	177.1	172.1	176.5	179.8	171.3	173.8	154.8	146.1	115.5	106.8	135.4
Asphalt products	130.0	80.8	113.6	119.8	121.1	127.6	118.0	128.0	88.1	53.1	86.8	91.9	76.6
Heating and plumbing equipment	133.3	116.6	125.4	123.3	118.5	156.5	158.0	158.6	113.5	89.1	103.0	101.2	105.6
Iron and steel products	155.7	152.2	164.2	164.0	152.1	140.2	138.2	159.2	145.5	145.1	142.6	135.2	150.8
Clay construction products..	146.4	137.6	146.5	147.3	145.9	155.3	139.0	151.1	137.3	119.1	113.5	102.7	112.9
	Quarterly Indexes												
	1955			1956						1957			
	Fourth quarter			First quarter		Second quarter		Third quarter		Fourth quarter		First quarter	
Gypsum products	185.4			187.6		188.6		157.3		145.2		141.7	
Plumbing fixtures	145.0			140.6		137.4		116.8		96.2		116.4	

Source: Table compiled by the Department of Commerce from data reported by various Government agencies and by private firms shown in notes to the tables following.

¹ Estimated. See Table F-6, footnote 2.

Chart 9.

Lumber and Wood Products Index of Production



SOURCE: DEPARTMENT OF COMMERCE

CONSTRUCTION REVIEW C.D. 57-10-1

Table F-2: Lumber and Wood Products: Production, Shipments, and Stocks

Period	Softwood lumber (Million board feet)			Hardwood flooring (Thousand board feet)			Douglas fir plywood (Million square feet)	Insulating boards (Tons)	Hardboard (Tons)
	Production	Shipments	Stocks*	Production	Shipments	Stocks*	Production		
1947-49 average.....	28,048	27,440	4,448	812,365	789,437	44,455	1,802	766,269	294,214
Year: 1954.....	29,296	29,811	5,261	1,145,118	1,139,091	68,425	3,871	1,007,653	464,868
1955.....	31,601	31,480	5,384	1,268,104	1,258,914	70,045	4,947	1,092,890	517,834
1956.....	30,003	29,259	6,143	1,166,446	1,117,010	114,074	5,191	1,118,907	551,118
12 months ending:									
November 1956.....	30,281	29,498	--	1,189,626	1,134,264	--	5,212	1,142,178	552,008
January 1957.....	29,857	29,148	--	1,156,757	1,104,393	--	5,183	1,111,461	545,393
February 1957.....	29,607	28,811	--	1,137,531	1,084,013	--	5,145	1,096,309	542,697
March 1957.....	29,377	28,449	--	1,111,326	1,065,343	--	5,079	1,072,599	541,678
1956: March.....	2,483	2,593	5,380	102,516	99,491	88,249	470	105,377	46,777
April.....	2,541	2,620	5,311	97,788	94,970	83,056	447	103,267	47,380
May.....	2,796	2,780	5,327	108,891	104,107	87,890	432	106,204	49,185
June.....	2,665	2,603	5,392	100,955	98,374	88,216	372	104,092	46,603
July.....	2,434	2,438	5,388	91,105	90,591	87,593	355	99,354	44,078
August.....	2,880	2,707	5,561	106,847	102,807	93,916	476	101,804	47,548
September.....	2,489	2,300	5,730	91,030	88,493	95,235	412	84,494	44,179
October.....	2,750	2,572	5,910	104,175	96,829	102,681	494	88,386	46,476
November.....	2,368	2,248	6,023	90,162	83,951	108,792	445	74,910	44,824
December.....	2,003	1,883	6,143	74,585	69,278	114,074	397	64,464	40,173
1957: January.....	2,159	2,116	6,130	91,310	82,340	123,194	440	85,189	44,006
February.....	2,039	1,951	6,218	78,167	72,782	128,579	405	78,768	41,468
March.....	2,253	2,231	6,240	76,311	80,821	120,826	404	81,667	45,758
Percent change									
March, 1956-57.....	-9	-14	+16	-26	-19	+37	-14	-23	-2
First 3 mos., 1956-57.....	-9	-11	--	-18	-18	--	-8	-16	-7

Source: Table compiled by Department of Commerce (BDSA) from data reported by the National Lumber Manufacturers Association, the Douglas Fir Plywood Association, and the Bureau of the Census.

*As of end of period.

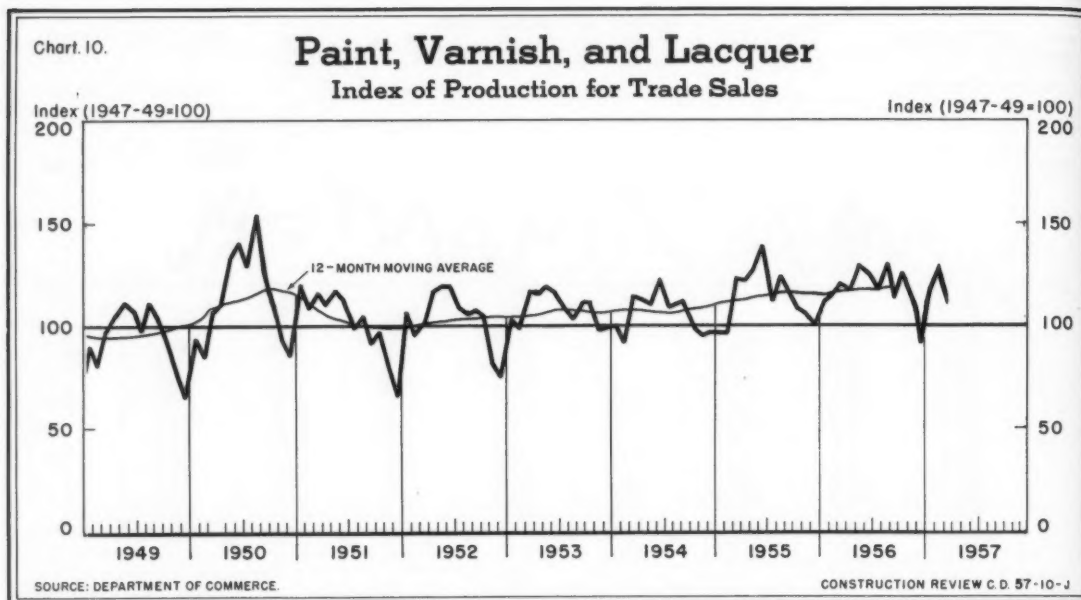


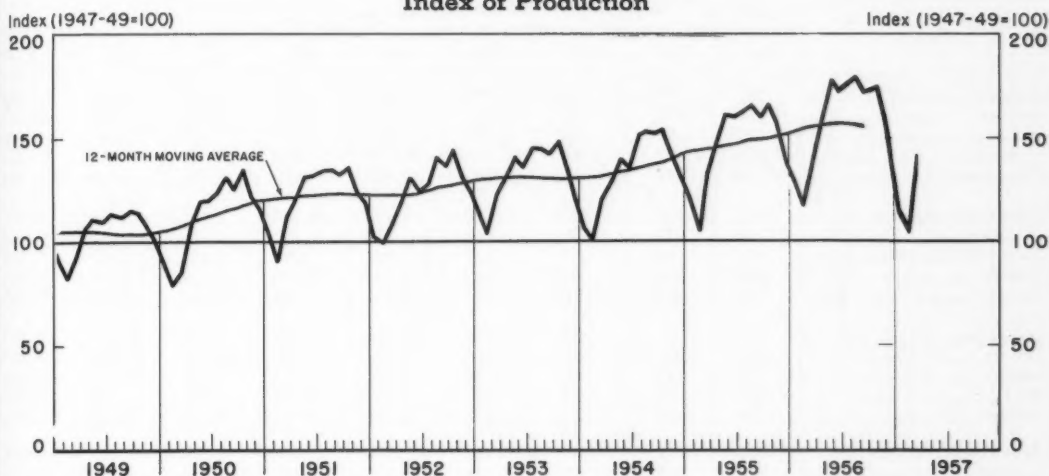
Table F-3: Millwork Products, and Paint, Varnish, and Lacquer: Production

Period	Production (Thousands of units)				Production for trade sales (Thousands of gallons)
	Ponderosa pine doors	Hardwood doors	Sash	Exterior frames	Paint, varnish, & lacquer
1947-49 average	3,780	3,172	11,246	4,152	266,701
Year: 1954	2,285	5,940	11,054	5,791	284,458
1955	2,253	6,786	12,733	7,259	312,416
1956	2,035	6,404	10,551	5,679	312,543
12 months ending:					
November 1956....	2,047	6,448	10,832	5,848	314,899
January 1957	2,020	6,355	10,401	5,574	312,617
February 1957....	2,001	6,275	10,173	5,461	315,508
March 1957.....	1,982	6,098	10,068	5,389	313,640
1956: March	182	625	771	460	26,768
April	168	618	738	476	26,199
May	176	572	913	535	28,738
June	164	534	844	569	27,650
July	127	445	758	465	26,105
August	203	559	1,222	685	28,855
September.....	170	529	1,018	479	25,259
October.....	192	558	1,103	508	27,903
November	161	513	799	352	24,407
December	137	410	616	245	20,282
1957: January	151	431	723	337	25,028
February	170	481	668	350	28,314
March	163	448	666	388	24,900
Percent change					
March, 1956-57	-10	-28	-14	-16	-7
First 3 mos., 1956-57	-10	-18	-19	-21	+1

Source: Table compiled by Department of Commerce (BDSA) from data reported by the National Wood Work Manufacturers Association (whose data on ponderosa pine and hardwood doors, sash and exterior frames are only from member firms, and are not adjusted to represent full coverage), and the Bureau of the Census.

Chart II.

Portland Cement Index of Production



SOURCE: DEPARTMENT OF COMMERCE.

CONSTRUCTION REVIEW C.D.57-10-K

Table F-4: Portland Cement, and Asphalt and Gypsum Products: Production, Shipments, and Stocks

Period	Pro- duction	Ship- ments	Stocks *	Shipments (Thousands of squares)				Shipments (Million square feet)	
	(Thousands of barrels)			Asphalt prepared roofing	Asphalt siding	Asphalt insulated brick siding	Asphalt and tar saturated felts	Gypsum board ¹	Gypsum lath ¹
	Portland cement								
1947-49 average	200,607	199,306	11,922	61,252	3,365	2,811	17,087	2,478	2,075
Year: 1954	271,277	274,096	16,731	59,132	1,428	2,297	28,991	4,217	2,484
1955	296,829	296,275	17,536	62,582	1,288	2,194	34,629	4,911	2,926
1956	316,465	311,571	22,412	59,265	1,235	2,053	30,152	4,814	2,647
12 months ending:									
November 1956	315,111	310,784	--	60,024	1,245	2,074	31,189		
January 1957	314,333	310,001	--	59,972	1,255	2,043	30,963		
February 1957	312,615	309,192	--	59,490	1,234	2,044	30,827		
March 1957	311,871	307,478	--	56,675	1,188	1,984	29,779	4,519	2,424
1956: March	23,386	22,471	29,854	6,157	120	183	3,294	1,339	719
April	26,134	27,261	28,675	3,951	64	151	1,742		
May	29,606	32,087	26,198	5,499	78	202	2,577	1,296	796
June	28,771	32,296	22,679	5,757	95	197	2,830		
July	29,498	31,598	20,585	5,800	101	206	2,844	1,124	602
August	30,055	33,607	17,406	6,166	117	244	2,804		
September	28,643	30,175	15,538	5,724	125	210	2,608	1,055	530
October	29,051	31,587	12,996	6,161	148	236	2,839		
November	25,874	22,906	15,975	4,011	124	142	2,315	1,044	496
December	24,429	17,990	22,412	2,227	68	72	1,717		
1957: January	19,308	11,930	29,819	3,895	103	84	2,609		
February	17,860	15,284	32,390	4,142	91	117	2,648		
March	22,642	20,757	34,267	3,342	74	123	2,246		
	Percent change								
March, 1956-57	- 3	- 8	+15	-46	-38	-33	-32	--	--
First 3 mos., 1956-57	- 7	- 8	--	-19	-15	-18	- 5	-22	-31

Source: Table compiled by Department of Commerce (BDISA) from data reported by the Department of Interior (Bureau of Mines), and the Bureau of the Census.

*As of end of period.

¹Data reported on quarterly basis.

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Table F-5: Portland Cement: Destination of Shipments, by State

State	(Thousands of barrels)								
	1956	1957		Calendar year			12 months ending--		
	Dec.	Jan.	Feb.	1953	1954	1955	Dec. 1956	Jan. 1957	Feb. 1957
Alabama	397	297	344	4,260	3,943	3,949	4,935	4,996	5,058
Arizona	193	183	227	2,433	2,215	2,337	2,621	2,612	2,651
Arkansas	126	53	88	1,762	1,894	2,519	1,841	1,828	1,836
California	2,447	2,097	2,310	27,737	28,528	31,553	35,854	35,758	35,364
Colorado	230	149	229	2,941	3,285	3,486	3,703	3,659	3,738
Connecticut	262	138	227	3,194	3,258	3,380	4,325	4,335	4,371
Delaware	53	21	45	902	910	1,097	1,086	1,062	1,048
District of Columbia	85	58	79	1,249	1,324	1,395	1,327	1,327	1,310
Florida	901	860	814	7,487	8,354	8,997	9,499	9,663	9,759
Georgia	382	257	343	4,644	4,441	5,198	5,381	5,289	5,247
Idaho	41	24	26	986	1,215	923	1,074	1,061	1,059
Illinois	822	281	633	13,439	14,973	14,670	16,719	16,463	16,423
Indiana	416	145	292	6,568	6,724	8,073	9,181	9,047	9,020
Iowa	165	56	109	4,941	5,863	5,883	6,774	6,748	6,730
Kansas	326	137	279	5,801	6,576	7,248	6,963	6,859	6,796
Kentucky	170	71	133	3,354	3,026	3,636	3,509	3,482	3,476
Louisiana	572	615	555	5,728	6,292	7,347	8,303	8,232	8,195
Maine	28	16	18	894	857	961	978	974	967
Maryland	309	219	309	4,676	4,447	4,882	5,764	5,747	5,729
Massachusetts	323	118	248	4,351	4,180	5,239	5,848	5,769	5,736
Michigan	585	289	416	12,716	13,076	13,991	16,215	15,999	15,844
Minnesota	212	97	135	4,968	5,500	5,838	5,515	5,505	5,404
Mississippi	147	105	129	1,696	1,732	1,972	1,977	1,984	1,993
Missouri	412	146	348	6,796	7,556	7,824	7,646	7,580	7,592
Montana	53	28	33	949	1,019	951	1,405	1,408	1,415
Nebraska	124	53	97	3,384	3,724	3,485	3,352	3,322	3,313
Nevada	34	28	34	618	842	737	616	597	589
New Hampshire	30	19	26	549	827	1,147	926	929	932
New Jersey	559	329	470	8,581	9,164	9,337	9,428	9,394	9,354
New Mexico	151	143	148	1,860	2,111	1,996	2,086	2,095	2,124
New York	1,065	525	769	19,134	20,290	19,399	20,400	20,294	20,251
North Carolina	300	282	278	3,715	4,009	4,414	4,384	4,447	4,443
North Dakota	30	11	17	1,148	1,161	1,150	1,294	1,288	1,263
Ohio	885	420	653	14,286	16,003	17,320	17,554	17,429	17,394
Oklahoma	365	186	298	4,158	4,364	4,785	4,815	4,790	4,787
Oregon	161	135	118	2,445	2,081	2,398	2,565	2,601	2,624
Pennsylvania	815	478	643	15,234	15,108	16,077	15,445	15,444	15,456
Rhode Island	38	15	33	857	685	822	819	814	807
South Carolina	199	132	151	2,217	1,993	2,461	2,359	2,345	2,330
South Dakota	35	22	35	1,246	1,116	1,221	1,374	1,376	1,377
Tennessee	325	156	226	4,856	4,683	5,088	4,843	4,804	4,776
Texas	1,589	1,317	1,460	16,158	19,081	20,781	20,953	20,942	20,909
Utah	92	78	86	1,343	1,508	1,835	2,010	2,004	2,039
Vermont	11	6	8	300	242	294	334	334	336
Virginia	336	253	299	4,701	4,474	4,801	5,419	5,424	5,397
Washington	205	140	201	5,413	5,684	5,656	4,677	4,637	4,655
West Virginia	121	67	99	1,921	2,379	2,053	1,937	1,953	1,965
Wisconsin	267	135	187	6,127	5,840	5,977	6,768	6,698	6,630
Wyoming	27	23	26	538	585	578	655	650	654

Source: Table compiled by Department of Commerce from data reported by Department of Interior (Bureau of Mines).

Chart 12.

Iron and Steel Products

Index of Shipments

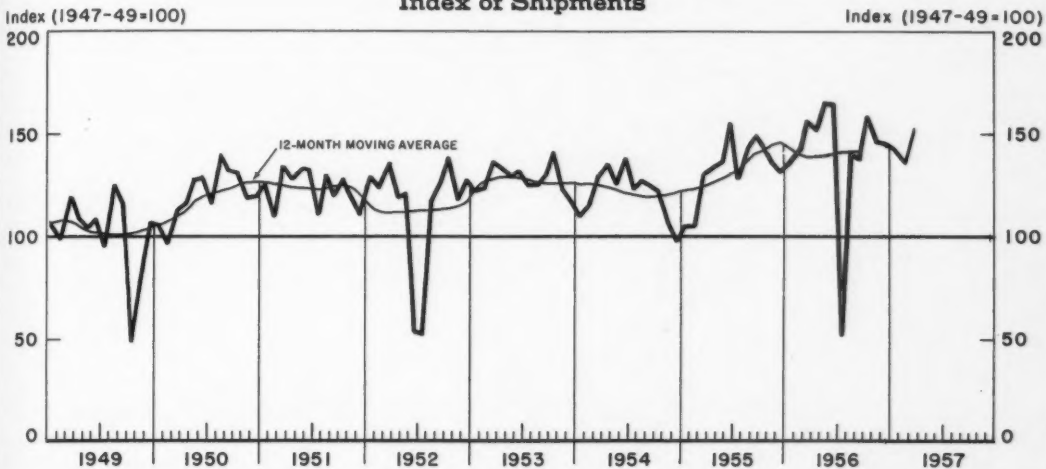


Table F-6: Iron and Steel Products: Shipments, Bookings, and Backlog

(Thousands of tons)

Period	Shipments									Shipments	Bookings	Backlog ¹
	Line pipe	Concrete reinforcing bars	Galvanized sheets	Nails	Piling	Rails	Cast-iron pipe		Rigid steel conduit				Fabricated structural steel
							Pressure	Soil				
1947-49 average	1,975	1,523	1,669	797	309	2,167	1,075	604	226	2,248	2,105	--
Year: 1954	2,595	1,751	2,363	567	388	1,196	1,376	744	227	3,136	2,510	743
1955	3,083	2,163	2,865	651	391	1,233	1,682	869	280	2,981	3,693	1,029
1956	3,377	2,518	2,958	559	433	1,300	1,745	817	359	3,205	4,012	1,313
12 months ending:												
November 1956	3,324	2,472	2,981	565	420	1,267	1,787	809	356	3,155	3,976	--
January 1957	3,464	2,560	2,925	551	444	1,302	1,715	815	364	3,216	3,905	--
February 1957	3,480	2,621	2,857	537	463	1,305	1,671	799	365	3,209	3,840	--
March 1957	3,551	2,644	2,773	523	478	1,306	1,647	784	369	3,207	3,763	--
1956: March	299	217	291	56	39	131	132	74	29	307	366	1,187
April	304	228	267	50	33	129	152	70	31	290	379	1,107
May	367	230	273	56	37	114	172	79	35	306	358	1,224
June	332	275	279	72	41	106	170	74	46	285	337	1,193
July	(2)	(2)	(2)	(2)	(2)	(2)	145	66	36	165	288	1,227
August	2286	2238	2276	254	233	267	180	80	28	213	268	1,191
September	241	234	257	55	45	128	151	66	24	241	246	1,226
October	333	250	279	52	47	131	171	71	27	288	291	1,239
November	322	250	255	36	47	118	116	60	27	276	339	1,267
December	331	240	239	29	49	131	92	54	27	298	404	1,313
1957: January	361	224	236	42	41	133	101	57	27	262	298	1,332
February	304	235	205	35	51	117	89	48	28	278	266	1,321
March	370	240	207	42	54	132	108	59	33	305	289	1,289
Percent change												
March, 1956-57	+24	+11	-29	-25	+37	+1	-18	-19	+16	-1	-21	+9
First 3 mos., 1956-57	+20	+22	-22	-24	+44	+2	-25	-16	+14	(3)	-23	--

Source: Table compiled by the Department of Commerce (BDSA) from data reported by the American Iron and Steel Institute, the National Electric Manufacturers Association, the American Institute of Steel Construction, and the Bureau of the Census. ¹ Scheduled for fabrication in the next 4 months. ² July data not available separately. The figures given here for August 1956 were reported as July-August totals by the American Iron and Steel Institute because the steel industry was shut down by work stoppages in effect during July. ³ Change of less than one-half of 1 percent.

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Table F-7: Clay Construction Products: Production and Shipments

Period	Brick, common and face (Million brick)		Structural clay tile (Thousand tons)		Vitrified clay sewer pipe (Thousand tons)		Hollow facing tile (Million brick equivalent)		Glazed & unglazed floor & wall tile (Thousand square feet)	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
1947-49 average	5,504	5,324	1,286	1,231	1,451	1,375	357	341	104,800	101,088
Year: 1954	6,720	6,657	981	908	1,763	1,703	481	464	177,988	176,253
1955	7,148	7,010	839	835	1,925	1,880	493	482	187,991	187,828
1956	7,319	6,695	773	674	1,962	1,856	531	494	201,372	186,124
12 months ending:										
November 1956	7,394	6,778	787	688	1,961	1,865	536	503	205,008	191,024
January 1957	7,192	6,574	758	666	1,974	1,843	526	486	197,177	183,476
February 1957	7,057	6,490	745	659	1,965	1,800	519	480	193,241	179,638
March 1957	6,914	6,403	735	656	1,946	1,774	505	469	187,849	176,902
1956: March	611	541	68	55	173	159	48	45	18,173	16,638
April	627	625	66	59	117	128	49	45	17,371	16,289
May	672	661	65	61	127	137	47	43	18,681	17,065
June	646	632	60	59	164	183	44	43	18,093	16,092
July	648	619	65	57	168	178	48	44	16,428	15,913
August	685	641	69	63	191	187	45	44	17,446	16,834
September	603	571	65	56	174	169	43	39	15,472	14,607
October	647	601	64	61	192	187	44	43	17,543	15,475
November	587	517	64	52	180	143	39	36	15,507	14,350
December	492	397	55	46	164	109	38	31	13,350	11,408
1957: January	438	314	54	46	167	108	38	34	13,332	13,234
February	401	371	50	44	148	112	36	33	11,845	11,643
March	468	455	58	52	154	133	34	34	12,781	13,902
Percent change										
March, 1956-57	-23	-16	-15	-5	-11	-16	-30	-26	-30	-16
First 3 mos., 1956-57	-24	-20	-19	-11	-3	-19	-19	-21	-26	-19

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census.

Table F-8: Clay Construction Products: Production and Shipments, by Census Region ¹

Census region	PRODUCTION				SHIPMENTS			
	March 1957		First 3 months 1957		March 1957		First 3 months 1957	
	Quantity	Percent change from Mar. 1956	Quantity	Percent change, 1956-57	Quantity	Percent change from Mar. 1956	Quantity	Percent change, 1956-57
Brick, common and face (thousands)								
U. S. TOTAL	467,798	-23	1,306,248	-24	454,575	-16	1,139,540	-20
New England	8,987	-13	25,420	-14	11,076	+32	28,032	+12
Middle Atlantic	80,831	-11	207,221	-18	74,173	-1	155,734	-19
East North Central	101,988	-31	276,955	-29	91,579	-25	221,233	-32
West North Central	20,910	-27	62,710	-25	21,688	-19	55,372	-12
South Atlantic	118,136	-24	328,998	-24	114,643	-20	288,741	-21
East South Central	50,314	-15	140,149	-19	47,151	-12	127,244	-15
West South Central	52,896	-26	167,133	-27	53,006	-11	146,141	-13
Mountain	21,877	-14	62,928	-10	19,686	-15	57,280	-7
Pacific	11,859	-46	34,734	-36	21,573	-30	59,763	-24
Structural clay tile (tons)								
U. S. TOTAL	57,747	-15	162,156	-19	51,984	-5	142,605	-11
Middle Atlantic	4,637	-27	16,014	-23	4,370	+4	13,088	+2
East North Central	3,933	-31	11,463	-39	3,653	-23	9,982	-35
West North Central	6,331	-35	13,673	-52	8,113	+25	21,599	+17
South Atlantic	20,065	+75	50,567	+74	17,350	+39	43,544	+15
East South Central	3,762	-11	10,891	-11	4,016	-3	10,281	-11
West South Central	18,029	-37	55,494	-35	13,310	-36	40,405	-31
Mountain & Pacific	990	-46	4,054	-29	1,172	-41	3,706	-33
Vitrified clay sewer pipe (tons)								
U. S. TOTAL	154,151	-11	468,967	-3	133,298	-16	352,881	-19
Middle Atlantic	16,486	-9	51,140	+5	11,727	-4	26,570	-21
East North Central	62,163	-18	187,494	-8	51,214	-30	131,426	-29
West North Central	16,121	-10	48,511	-3	12,825	-19	29,637	-22
South Atlantic	14,573	+102	44,995	+23	12,475	+70	35,702	-19
E. & W. South Central	19,486	-27	64,048	-11	16,501	-25	59,079	-8
Mountain	3,214	-9	11,476	-3	3,526	-3	8,928	-8
Pacific	22,108	-7	61,303	-1	25,030	-1	61,539	(2)

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census.

¹ Composition of regions, and nonfarm population distribution by region, are shown below table A-2.² Change of less than one-half of 1 percent.

Chart 13.

Clay Construction Products

Index of Production

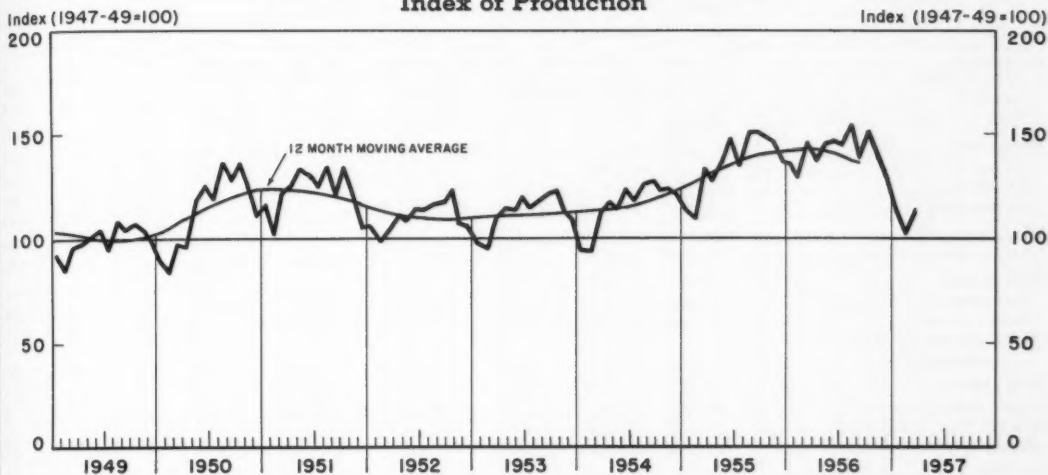


Table F-9: Heating and Plumbing Equipment: Shipments and Stocks

Period	Gas water heaters (Thousands of units)		C. I. convectors and radiators (Thousand square feet)		Warm air furnaces (Thousands of units)		Floor and wall furnaces (Thousands of units)		Residential oil burners ¹ (Thousands of units)
	Shipments	Stocks*	Shipments	Stocks*	Shipments	Stocks*	Shipments	Stocks*	
1947-49 average	1,818	67	50,980	4,377	794	69	552	44	541
Year: 1954	2,445	103	28,941	5,434	1,035	130	610	74	516
1955	2,633	108	28,518	4,834	1,405	191	615	70	650
1956	2,666	90	27,259	3,878	1,265	192	469	68	456
12 months ending:									
November 1956	2,691	--	27,276	--	1,277	--	483	--	466
January 1957	2,652	--	26,953	--	1,254	--	466	--	454
February 1957	2,608	--	26,514	--	1,242	--	468	--	452
March 1957	2,575	--	26,515	--	1,232	--	461	--	451
1956: March	255	96	1,802	5,814	85	255	34	92	27
April	230	102	1,900	6,082	85	263	32	91	31
May	231	107	1,577	6,912	94	275	34	93	32
June	237	114	1,618	7,519	104	267	35	86	39
July	227	92	1,959	6,626	112	247	39	79	36
August	238	88	2,996	5,977	160	221	48	76	50
September	217	99	3,089	5,277	155	203	54	65	56
October	226	90	3,719	4,263	133	198	60	60	62
November	182	82	2,589	4,074	100	189	43	62	38
December	153	90	1,756	3,878	71	192	28	68	24
1957: January	210	76	1,712	4,139	76	195	30	67	30
February	202	78	1,797	4,362	67	207	31	60	27
March	222	62	1,803	4,750	75	214	27	63	26
Percent change									
March, 1956-57	-13	-35	(2)	-18	-12	-16	-20	-32	-4
First 3 mos., 1956-57	-13	--	-12	--	-14	--	-9	--	-7

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census. * As of end of period.

¹ Sold separately.² Change of less than one-half of 1 percent.

(NOTE: Table F-10, Imports and Exports of Selected Construction Materials, is shown quarterly in the February, May, August, and November issues.)

Table F-11: Plumbing Fixtures: Production, Shipments, and Stocks

Type of fixture	Number of fixtures						Percent change, 1st quarter, 1956-57		
	1st quarter 1957			1st quarter 1956			Produc- tion	Ship- ments	Stocks*
	Produc- tion	Ship- ments	Stocks*	Produc- tion	Ship- ments	Stocks*			
Lavatories	939,395	911,711	613,596	¹ 1,085,326	¹ 996,824	¹ 581,794	-13	-9	+5
Vitreous china	575,752	529,799	342,969	¹ 597,414	¹ 566,709	¹ 234,217	-4	-7	+46
Cast-iron	294,980	324,203	206,981	401,112	351,562	286,592	-26	-8	-28
Steel	68,663	57,715	63,646	¹ 86,800	¹ 78,553	¹ 60,985	-21	-27	+4
Water closets	¹ 1,107,249	992,481	591,388	¹ 1,296,758	¹ 1,249,733	¹ 276,162	-15	-21	+114
Syphon jet	157,513	132,808	118,253	160,199	154,050	58,551	-2	-14	+102
Washdown	435,505	426,462	197,886	¹ 569,655	¹ 550,777	¹ 105,085	-24	-23	+88
Reverse trap	514,231	433,211	275,269	¹ 566,904	¹ 544,906	¹ 112,526	-9	-20	+145
Flush tanks, vitreous china	888,800	824,090	483,508	¹ 1,056,525	¹ 1,049,580	¹ 250,080	-16	-21	+93
Urinals, vitreous china	50,189	43,009	28,267	47,126	43,568	18,608	+6	-1	+52
Kitchen sinks	552,714	518,080	430,994	¹ 660,053	¹ 595,079	¹ 483,354	-16	-13	-11
Cast-iron	207,437	227,243	148,598	270,354	260,633	191,006	-23	-13	-22
Steel	344,748	290,123	282,060	¹ 388,743	¹ 333,461	¹ 291,556	-11	-13	-3
Other metals and glazed earthenware ²	529	714	336	¹ 956	¹ 985	792	-45	-28	-58
Wash sinks	-6,012	5,630	5,060	5,916	4,980	4,709	+2	+13	+7
Service sinks	22,782	24,896	15,819	28,580	26,580	17,392	-20	-6	-9
Sink and laundry tray comb.	23,912	20,668	22,775	¹ 34,403	¹ 28,273	¹ 32,477	-30	-27	-30
Laundry trays	29,366	27,496	15,885	¹ 37,437	¹ 37,164	¹ 21,312	-22	-26	-25
Bathtubs	460,628	470,527	278,355	¹ 601,023	¹ 515,154	¹ 353,490	-23	-9	-21
Cast-iron	348,637	339,314	220,399	444,432	373,277	276,889	-22	-9	-20
Steel	111,991	131,213	57,956	¹ 156,591	¹ 141,877	¹ 76,601	-28	-8	-24
Shower stalls, including receptors ..	44,745	51,320	11,809	57,447	55,597	14,773	-22	-8	-20

Source: Department of Commerce.

* As of end of period.

¹ Revised.² Includes vitreous china.

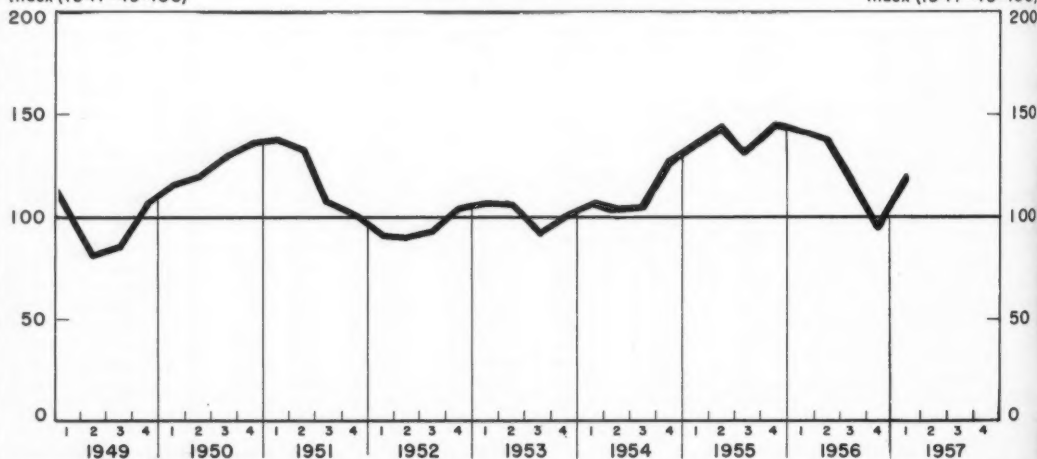
Chart 14

Plumbing Fixtures

Index of Production

Index (1947-49=100)

Index (1947-49=100)



SOURCE: DEPARTMENT OF COMMERCE.

CONSTRUCTION REVIEW C.D. 57-10-R

Part G--Employment

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Table G-1: Contract Construction: Employment by Type of Contractor

Period	All contractors	Building contractors							Nonbuilding contractors		
		All building contractors	General contractors	Special trades contractors					All non-building	Highway and street	Other non-building
				All special trades	Plumbing and heating	Painting and decorating	Electrical work	Other trades			
NUMBER OF EMPLOYEES (in thousands)											
Year: 1948.....	2,169.0	1,753.0	807.0	946.0	238.2	124.9	123.2	459.8	416.0	172.1	243.8
1949.....	2,165.0	1,736.0	779.0	957.0	241.7	123.4	122.1	469.5	428.0	178.1	250.3
1950.....	2,333.0	1,885.0	844.0	1,041.0	263.1	130.8	123.4	524.0	448.0	183.0	265.2
1951.....	2,603.0	2,109.0	957.6	1,151.7	286.9	155.7	140.5	568.7	493.0	201.3	291.9
1952.....	2,634.0	2,119.0	948.3	1,170.8	287.7	156.5	155.7	570.9	514.0	209.4	305.0
1953.....	2,622.0	2,109.0	934.0	1,175.1	288.9	148.1	159.7	578.4	513.0	214.9	297.8
1954.....	2,593.0	2,090.0	885.7	1,204.0	295.7	143.8	164.4	600.1	503.0	217.4	285.6
1955.....	2,780.0	2,279.0	937.7	1,341.6	318.3	165.6	169.1	688.6	501.0	222.9	278.2
1956.....	3,037.0	2,515.0	1,043.4	1,471.5	334.5	185.6	190.0	761.4	522.0	227.9	294.5
1956: Mar.....	2,669.0	2,244.0	914.2	1,330.1	313.5	147.3	170.7	698.6	425.0	168.0	256.8
Apr.....	2,853.0	2,376.0	981.8	1,394.4	317.3	166.2	173.7	737.2	477.0	204.5	272.4
May.....	3,040.0	2,501.0	1,038.4	1,462.4	327.4	185.6	179.1	770.3	539.0	242.1	296.7
June.....	3,257.0	2,666.0	1,126.4	1,539.6	340.3	205.0	187.6	806.7	591.0	271.9	319.2
July.....	3,270.0	2,679.0	1,134.4	1,544.9	344.6	209.7	194.0	796.6	591.0	276.6	314.7
Aug.....	3,353.0	2,746.0	1,166.2	1,579.6	349.6	220.7	199.3	810.0	607.0	282.7	324.7
Sept.....	3,340.0	2,734.0	1,153.9	1,579.7	353.2	216.9	204.4	805.2	606.0	280.3	325.3
Oct.....	3,301.0	2,707.0	1,137.7	1,568.8	354.2	208.7	208.4	797.5	594.0	269.3	325.0
Nov.....	3,191.0	2,640.0	1,093.3	1,546.4	349.8	198.9	209.7	788.0	551.0	237.6	313.7
Dec.....	3,029.0	2,535.0	1,039.8	1,495.5	344.7	182.8	212.8	755.2	494.0	200.1	293.7
1957: Jan.....	2,719.0	2,290.0	921.0	1,369.1	335.1	157.0	209.4	667.6	429.0	164.4	264.3
Feb.....	2,725.0	2,300.0	914.5	1,385.4	332.6	154.3	208.9	689.6	425.0	158.8	266.0
Mar.....	2,806.0	2,361.0	939.6	1,421.3	332.4	161.6	208.0	719.3	445.0	172.2	272.4
Apr.....	*2,929.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Percent change											
Feb.-Mar. 1957.....	+3.0	+2.7	+2.7	+2.6	-0.1	+4.7	-0.4	+4.3	+4.7	+8.4	+2.4
Mar., 1956-57.....	+5.1	+5.2	+2.8	+6.9	+6.0	+9.7	+21.9	+3.0	+4.7	+2.5	+6.1

Source: Department of Labor.

* Percent change: Mar.-Apr. 1957, +4.4; Apr. 1956-57, +2.7.

¹ Not yet available.

Table G-2: Contract Construction: Number of Employees and Indexes of Employment (Seasonally Adjusted)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
NUMBER OF EMPLOYEES (in thousands, seasonally adjusted)													
1948.....	2,120	2,015	2,065	2,105	2,136	2,184	2,199	2,212	2,220	2,229	2,249	2,251	2,169
1949.....	2,222	2,171	2,146	2,128	2,124	2,130	2,157	2,176	2,197	2,192	2,190	2,141	2,165
1950.....	2,119	2,101	2,105	2,173	2,236	2,337	2,405	2,451	2,473	2,502	2,517	2,471	2,333
1951.....	2,526	2,521	2,569	2,593	2,596	2,613	2,633	2,641	2,630	2,653	2,606	2,620	2,603
1952.....	2,599	2,624	2,588	2,586	2,597	2,645	2,658	2,672	2,682	2,648	2,650	2,632	2,634
1953.....	2,647	2,669	2,653	2,638	2,613	2,598	2,588	2,596	2,612	2,632	2,623	2,626	2,622
1954.....	2,533	2,583	2,600	2,614	2,603	2,599	2,591	2,594	2,586	2,584	2,618	2,615	2,593
1955.....	2,624	2,618	2,703	2,752	2,804	2,815	2,834	2,833	2,852	2,833	2,822	2,827	2,780
1956.....	2,876	2,924	2,966	3,003	3,055	3,132	3,056	3,076	3,078	3,085	3,083	3,075	3,037
1957.....	3,021	3,079	3,118	3,083									
INDEXES (1947-49=100) OF EMPLOYMENT (seasonally adjusted) ¹													
1948.....	100.7	95.7	98.1	100.0	101.5	103.8	104.5	105.1	105.5	105.9	106.8	106.9	103.0
1949.....	105.6	103.1	101.9	101.1	100.9	101.2	102.5	103.4	104.4	104.1	104.0	101.7	102.9
1950.....	100.7	99.8	100.0	103.2	106.2	111.0	114.3	116.4	117.5	118.9	119.6	117.4	110.8
1951.....	120.0	119.8	122.0	123.2	123.3	124.1	125.1	125.5	124.9	126.0	123.8	124.5	123.7
1952.....	123.5	124.7	122.9	122.9	123.4	125.7	126.3	126.9	127.4	125.8	125.9	125.0	125.1
1953.....	125.7	126.8	126.0	125.3	124.1	123.4	122.9	123.3	124.1	125.0	124.6	124.8	124.6
1954.....	120.3	122.7	123.5	124.2	123.7	123.5	123.1	123.2	122.9	122.8	124.4	124.2	123.2
1955.....	124.7	124.4	128.4	130.7	133.2	133.7	134.6	134.6	135.5	134.6	134.1	134.3	132.1
1956.....	136.6	138.9	140.9	142.7	145.1	148.8	145.2	146.1	146.2	146.6	146.5	147.6	144.1
1957.....	143.5	146.3	148.1	146.5									

Source: Department of Labor.
Federal Reserve Board.

¹ Indexes for months before January 1953 are based on seasonally adjusted employment data derived by the

CONSTRUCTION REVIEW

Table G-3: Contract Construction: Employment, by State

State	Number of employees (in thousands)										Percent change	
	1956				1957			1956	Annual average		Mar.	Year
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Mar.	1955	1956	1956-57	1955-56
Alabama	41.9	42.1	41.9	41.6	41.2	41.2	40.7	34.3	33.8	38.9	+19	+15
Arizona	21.1	21.2	20.7	21.1	20.0	20.1	19.8	19.0	19.4	20.1	+ 4	+ 4
Arkansas	17.2	16.8	15.6	14.7	13.3	13.5	14.3	14.7	16.2	15.9	- 3	- 2
California	299.5	297.2	292.3	287.3	271.3	272.2	268.6	272.4	266.5	284.7	- 1	+ 7
Colorado	36.2	36.1	33.9	31.6	29.7	28.0	28.0	28.1	30.5	32.5	(1)	+ 7
Connecticut ²	53.1	53.0	52.4	49.7	42.3	42.8	43.5	43.0	44.9	49.0	+ 1	+ 9
Delaware	19.3	17.9	17.1	15.7	12.9	11.9	11.9	16.7	12.3	17.9	-29	+46
District of Columbia ..	18.2	18.5	18.1	17.2	16.7	16.9	17.3	16.2	17.0	17.4	+ 7	+ 2
Florida	115.0	115.8	118.4	116.4	113.0	109.3	107.9	100.4	97.3	109.8	+ 7	+13
Georgia	56.2	56.4	54.7	53.0	50.0	50.1	50.7	50.5	51.0	54.2	(1)	+ 6
Idaho	10.4	9.6	8.4	8.1	7.1	6.6	6.9	7.0	8.7	9.4	- 1	+ 8
Illinois	203.3	204.2	197.4	185.9	167.2	173.1	181.6	166.0	169.7	187.6	+ 9	+11
Indiana	83.2	78.0	73.1	68.1	57.1	58.5	62.1	68.4	68.3	75.3	- 9	+10
Iowa	43.9	43.9	39.3	34.4	29.9	30.1	31.6	29.7	34.8	38.1	+ 6	+ 9
Kansas	40.8	38.5	36.4	33.6	29.6	30.4	32.3	37.2	38.5	38.7	-13	+ 1
Kentucky ³	--	--	--	--	--	--	--	--	--	--	--	--
Louisiana	61.6	63.4	65.3	67.7	67.1	65.1	66.8	53.0	49.6	58.7	+26	+18
Maine	15.2	15.3	14.6	13.1	10.7	10.0	9.8	8.9	13.5	13.1	+10	- 3
Maryland	77.0	76.1	73.0	69.3	60.2	60.6	63.0	64.4	64.4	71.0	- 2	+10
Massachusetts	91.6	90.1	87.9	79.4	66.5	65.8	68.7	68.0	77.4	81.9	+ 1	+ 6
Michigan	132.5	130.2	122.2	109.2	98.8	99.3	99.8	102.0	114.1	116.4	- 2	+ 2
Minnesota	66.2	64.2	53.6	46.3	40.6	40.8	40.8	42.5	55.4	55.1	- 4	- 1
Mississippi	17.4	16.2	15.7	15.7	14.8	13.9	13.7	15.2	17.6	16.3	-10	- 7
Missouri	76.2	74.8	73.8	69.8	63.6	65.6	68.2	68.7	74.2	72.2	- 1	- 3
Montana	15.4	14.5	12.6	10.2	8.7	8.4	8.7	7.3	10.4	11.7	+19	+13
Nebraska	23.6	23.2	21.3	18.7	16.4	16.8	18.2	19.1	22.2	21.4	- 5	- 4
Nevada	8.0	7.5	7.0	7.2	6.7	6.4	6.8	7.8	9.1	7.8	-13	-14
New Hampshire	10.5	10.3	9.6	8.8	7.1	6.8	7.0	7.2	10.2	9.5	- 3	- 7
New Jersey	114.9	113.9	112.2	107.6	94.7	92.8	98.4	92.7	102.1	105.4	+ 6	+ 3
New Mexico	15.3	16.1	16.1	16.0	14.8	14.5	15.3	14.4	14.7	15.3	+ 6	+ 4
New York	273.6	272.7	263.8	248.3	221.4	221.6	234.3	215.8	240.2	250.1	+ 9	+ 4
North Carolina	59.5	59.0	58.3	57.5	53.4	50.9	51.5	55.8	53.5	58.1	- 8	+ 9
North Dakota	12.9	12.5	10.3	7.4	6.1	5.6	5.7	4.8	8.4	9.3	+19	+11
Ohio	177.3	177.3	172.7	159.5	140.6	147.3	154.3	142.0	163.0	159.4	+ 9	- 2
Oklahoma	38.0	36.9	36.6	35.1	33.0	34.1	34.8	33.6	33.4	35.1	+ 4	+ 5
Oregon	29.2	28.0	25.3	23.0	21.2	21.3	20.9	20.6	22.6	24.6	+ 1	+ 9
Pennsylvania	205.0	202.6	194.5	175.6	146.8	148.9	157.7	163.4	184.5	185.1	- 3	(1)
Rhode Island	18.6	17.7	17.8	16.2	13.5	14.7	16.2	15.2	16.9	17.3	+ 7	+ 2
South Carolina	29.4	28.3	28.1	27.1	26.3	26.8	27.5	27.9	29.4	28.4	- 1	- 3
South Dakota	12.9	12.6	10.6	8.3	7.0	6.7	7.2	6.0	9.6	10.0	+20	+ 4
Tennessee	47.1	44.9	42.5	40.4	37.3	37.6	38.7	40.5	46.6	43.4	- 4	- 7
Texas	169.7	169.2	168.4	166.0	162.5	163.8	163.3	155.5	159.0	163.1	+ 5	+ 3
Utah	18.2	17.6	16.6	13.7	13.1	12.8	13.4	13.0	14.6	15.4	+ 3	+ 5
Vermont	5.5	5.4	5.0	4.4	3.5	3.5	3.6	3.4	4.4	4.6	+ 6	+ 5
Virginia	74.2	73.1	72.4	70.4	68.7	70.1	72.8	60.1	61.3	68.8	+21	+12
Washington	50.1	49.7	45.7	42.6	40.0	37.5	40.2	38.8	46.5	43.9	+ 4	- 6
West Virginia	25.3	25.6	24.7	22.9	20.0	21.2	23.3	19.3	19.3	22.7	+21	+18
Wisconsin	66.3	64.1	60.6	55.0	49.5	50.2	50.0	48.9	56.9	58.6	+ 2	+ 3
Wyoming	9.5	9.5	7.4	6.1	5.2	5.1	5.5	4.9	6.3	7.1	+12	+13

Source: Department of Labor.

¹Change of less than one-half of 1 percent.² Includes a small number of employees in mining.³ Not available.

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Table G-4: Contract Construction: Employment in Selected Areas

Area	Number of employees (in thousands)										Percent change	
	1956				1957			1956	Annual average		Mar.	Year
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Mar.	1955	1956	1956-57	1955-56
Albany-Schenectady-Troy, N.Y.	7.9	8.4	8.3	8.1	6.7	6.8	6.8	5.8	6.7	7.2	+17	+7
Albuquerque, N. Mex.	4.6	4.8	4.4	4.4	4.4	4.5	4.6	4.8	5.0	4.7	-4	-6
Atlanta, Ga. ¹	19.8	19.9	18.8	17.8	16.9	17.1	17.5	18.9	18.5	19.4	-7	+5
Baltimore, Md.	47.3	47.2	45.8	43.6	39.4	39.7	41.2	41.5	40.2	44.4	-1	+10
Baton Rouge, La.	6.7	6.8	6.8	6.8	7.1	(2)	(2)	6.1	5.4	6.5	--	+20
Binghamton, N. Y.	3.4	3.2	3.0	2.3	2.0	1.9	2.0	2.1	2.8	2.9	-5	+4
Birmingham, Ala.	13.3	13.7	13.5	13.4	12.9	12.9	13.0	10.9	10.5	12.5	+19	+19
Boise, Idaho	2.2	2.0	1.9	1.8	1.6	1.5	1.5	1.6	1.6	1.9	-6	+19
Boston, Mass.	52.5	52.3	51.2	48.1	38.2	38.4	41.2	38.5	43.7	46.8	+7	+7
Bridgeport, Conn. ³	6.6	6.4	6.2	5.8	5.2	5.1	5.5	5.4	5.7	6.0	+2	+5
Buffalo, N. Y.	24.9	24.6	23.9	20.4	18.1	18.6	19.3	16.7	19.5	21.3	+16	+9
Casper, Wyo.	1.5	1.5	1.4	1.3	1.1	1.2	1.1	1.2	1.1	1.5	-8	+36
Charleston, S. C.	3.6	3.8	3.8	3.8	3.6	3.6	3.7	3.3	3.3	3.5	+12	+6
Charleston, W. Va.	5.3	5.4	5.1	4.6	4.9	4.9	4.9	3.9	3.9	4.4	+26	+13
Charlotte, N. C.	9.1	9.1	9.3	8.9	8.4	7.9	8.0	8.8	8.1	8.9	-9	+10
Chattanooga, Tenn.	3.7	3.7	3.6	3.4	3.0	3.3	3.1	3.7	4.7	3.7	-16	-21
Chicago, Ill.	140.3	140.5	136.1	131.3	119.7	122.1	125.8	119.2	116.2	131.9	+6	+14
Denver, Colo.	22.3	22.2	21.0	20.1	18.6	18.5	18.6	18.3	19.0	20.9	+2	+10
Des Moines, Iowa	6.0	5.6	5.1	4.6	4.2	4.1	(2)	4.4	4.9	5.3	--	+8
Detroit, Mich.	68.8	67.9	64.7	56.1	52.1	52.7	52.9	57.4	63.0	62.0	-8	-2
Duluth, Minn.	2.6	2.9	2.8	2.5	2.2	2.4	2.6	1.9	2.1	2.4	+37	+14
Evansville, Ind. ⁴	4.5	4.3	4.3	4.0	3.8	3.9	4.0	3.6	4.1	4.1	+11	0
Fargo, N. D.	2.7	2.6	2.2	1.8	1.7	1.5	1.5	1.3	2.0	2.0	+15	0
Fort Wayne, Ind.	3.8	3.5	3.4	3.2	2.7	2.7	2.9	3.4	3.6	3.6	-15	0
Great Falls, Mont.	2.3	2.3	1.8	1.3	1.1	1.1	1.2	1.2	1.5	1.7	0	+13
Harrisburg, Pa.	9.7	9.4	9.0	8.1	6.7	7.0	8.1	6.4	7.6	8.0	+27	+5
Hartford, Conn. ³	11.4	11.2	11.0	10.6	9.4	9.1	9.2	9.0	9.6	10.5	+2	+9
Indianapolis, Ind.	14.9	14.7	14.5	13.6	12.7	12.2	12.7	11.5	12.9	13.4	+10	+4
Jackson, Miss.	4.1	4.0	3.8	3.6	3.6	3.5	3.5	4.1	4.7	4.0	-15	-15
Jacksonville, Fla.	9.5	9.6	9.6	9.5	9.4	9.2	9.2	9.0	9.4	9.4	+2	0
Kansas City, Mo.	19.9	19.7	19.3	18.4	17.3	18.2	(2)	19.3	20.8	19.7	--	-5
Knoxville, Tenn.	7.3	7.7	7.5	7.3	7.2	6.9	7.0	6.0	10.0	6.8	+17	-32
Lewiston, Maine	1.3	1.3	1.2	1.1	1.0	.9	.9	1.0	1.2	1.2	-10	0
Little Rock-North Little Rock, Ark.	5.6	5.3	5.0	4.4	3.7	3.4	3.6	5.4	5.6	5.3	-33	-5
Los Angeles, Calif.	135.8	133.4	130.3	128.8	123.2	124.9	125.5	130.2	126.1	131.3	-4	+4
Louisville, Ky.	16.5	16.1	14.3	13.4	12.2	12.5	13.1	13.2	15.0	14.9	-1	-1
Manchester, N. H.	2.2	2.2	2.1	2.0	1.7	1.6	1.6	1.7	2.1	2.0	-6	-5
Memphis, Tenn.	9.3	8.6	8.3	8.2	7.4	7.5	7.4	9.4	10.4	9.1	-21	-13
Miami, Fla.	27.0	26.3	26.4	26.7	24.5	22.9	22.9	22.4	25.3	24.8	+2	-2
Milwaukee, Wis.	25.0	24.5	23.8	22.0	20.2	20.4	20.1	19.8	21.1	22.5	+2	+7
Minneapolis-St. Paul, Minn.	32.5	32.4	28.9	26.2	22.9	23.4	23.5	24.7	27.1	29.2	-5	+8
Mobile, Ala.	5.1	5.1	5.0	5.1	4.9	4.8	4.9	5.0	5.0	5.0	-2	0
Nashville, Tenn.	7.6	7.7	7.5	6.5	6.0	6.0	6.3	6.7	6.9	6.8	-6	-1
New Bedford, Mass. ⁵	1.5	1.6	1.6	1.3	1.1	1.2	1.1	1.3	1.6	1.5	-15	-6
New Britain, Conn. ³	1.6	1.5	1.5	1.4	1.2	1.2	1.3	1.2	1.3	1.4	+8	+8
New Haven, Conn. ³	8.2	8.1	8.0	7.7	7.2	7.2	7.3	6.8	6.6	7.6	+7	+15
New Orleans, La.	16.4	16.7	16.8	16.5	16.4	20.9	20.3	15.1	16.2	18.9	+34	+17
New York-Northeastern N. Jersey	238.7	234.4	228.3	220.7	199.8	194.9	206.3	201.0	216.9	222.0	+3	+2
Newark-Jersey City, N. J.	30.3	29.8	28.8	27.9	25.0	23.8	24.6	25.9	29.8	28.9	-5	-3
Paterson, N. J.	26.1	25.3	24.8	24.5	22.4	21.9	22.3	20.1	22.0	23.2	+11	+5
Perth Amboy, N. J.	10.3	9.5	9.4	8.9	7.6	6.8	7.6	6.8	7.0	8.3	+12	+19
Nassau-Suffolk Counties, N. Y.	34.3	33.5	32.4	29.1	22.6	22.0	24.4	27.9	30.8	31.2	-13	+1
New York, N. Y.	114.3	114.1	111.2	110.2	104.4	104.8	111.2	104.1	107.1	110.2	+7	+3
Westchester County, N. Y.	20.9	19.7	19.2	17.7	15.0	14.5	14.9	14.9	17.8	18.2	0	+2

See footnotes at end of table.

CONSTRUCTION REVIEW

Table G-4: Contract Construction: Employment in Selected Areas--Continued

Area	Number of employees (in thousands)										Percent change	
	1956				1957			1956	Annual average		Mar.	Year
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Mar.	1955	1956	1956-57	1955-56
Norfolk-Portsmouth, Va.	13.2	13.2	13.4	12.9	12.4	12.6	12.8	9.9	11.0	12.0	+29	+9
Oklahoma City, Okla.	11.1	10.7	10.4	9.8	9.3	9.5	9.6	10.2	10.4	10.4	-6	0
Omaha, Nebr.	9.9	10.0	9.4	8.2	7.2	7.2	7.6	7.8	8.4	8.9	-3	+6
Peoria, Ill.	5.2	5.2	4.9	4.3	3.6	4.2	4.5	4.5	5.0	4.7	0	-6
Phoenix, Ariz.	10.9	11.0	10.9	11.1	10.7	10.7	10.7	9.9	10.2	10.4	+8	+2
Pittsburgh, Pa.	51.1	52.5	51.4	49.9	42.1	44.5	47.1	41.4	42.1	46.7	+14	+11
Portland, Maine	4.4	4.5	4.2	3.9	3.3	3.2	3.3	3.0	3.7	4.0	+10	+8
Portland, Oreg.	15.9	15.4	14.2	13.2	12.4	12.6	12.5	12.9	13.3	14.1	-3	+6
Providence, R. I.	16.5	15.7	15.8	14.4	(3)	13.1	14.3	13.5	15.0	15.3	+6	+2
Racine, Wis.	2.4	2.2	2.1	2.0	1.8	1.8	2.0	1.8	2.0	2.1	+11	+5
Reno, Nev.	2.5	2.4	2.2	2.3	2.1	2.2	2.3	2.1	2.3	2.2	+10	-4
Richmond, Va.	12.8	12.6	12.3	12.0	11.3	11.5	11.8	11.3	10.8	12.1	+4	+12
Rochester, N. Y.	11.4	10.8	10.5	9.6	8.4	8.2	8.5	8.1	9.4	9.9	+5	+5
Rockford, Ill. ³	4.4	4.4	4.1	3.8	3.3	3.3	3.3	3.4	3.7	4.1	-3	+11
Sacramento, Calif.	10.3	10.2	9.9	9.4	9.0	8.8	8.1	8.4	8.8	9.4	-4	+7
St. Louis, Mo.	44.8	43.4	41.5	40.4	36.3	36.8	39.4	40.5	43.5	42.3	-3	-3
Salt Lake City, Utah	9.6	9.5	8.5	8.0	7.0	7.2	7.4	8.0	8.6	8.7	-8	+1
San Diego, Calif.	14.4	14.3	14.2	14.6	14.2	14.5	14.4	13.2	12.7	13.9	+9	+9
San Francisco-Oakland, Calif.	64.5	64.3	62.8	60.2	56.4	54.9	53.5	60.4	59.5	61.7	-11	+4
San Jose, Calif.	11.6	11.3	11.4	10.5	9.8	9.4	9.1	10.1	10.1	10.9	-10	+8
Savannah, Ga.	4.1	4.3	3.9	3.8	3.5	3.6	3.7	3.3	3.3	3.8	+12	+15
Seattle, Wash.	17.4	16.6	15.6	14.9	14.2	14.0	14.8	13.1	14.4	15.0	+13	+4
Sioux Falls, S. D.	2.0	2.0	1.7	1.3	1.0	1.0	1.0	1.2	1.9	1.7	-17	-11
South Bend, Ind.	3.8	3.7	3.5	2.8	2.6	2.6	2.7	2.9	3.6	3.3	-7	-8
Spokane, Wash.	5.9	5.8	4.7	4.1	3.5	3.1	3.5	3.5	4.3	4.7	0	+9
Springfield-Holyoke, Mass.	8.4	8.4	8.4	7.2	6.2	5.6	6.1	6.4	7.1	7.8	-5	+10
Stamford, Conn. ³	4.6	4.5	4.4	4.3	4.1	4.1	4.1	4.0	3.9	4.3	+3	+10
Syracuse, N. Y.	8.0	7.8	7.7	7.0	5.3	5.9	5.8	5.0	6.5	6.7	+16	+3
Tacoma, Wash.	4.3	4.3	4.3	3.8	3.6	3.4	3.5	3.8	4.0	3.9	-8	-3
Tampa-St. Petersburg, Fla.	16.5	16.7	17.1	17.2	17.2	17.7	18.0	16.0	14.6	16.5	+13	+13
Topeka, Kans.	4.2	4.0	3.8	3.4	3.0	3.0	3.3	3.3	3.0	3.8	0	+27
Trenton, N. J.	4.2	4.3	4.1	4.1	3.5	3.8	3.9	3.3	3.6	3.9	+18	+8
Tucson, Ariz.	4.9	4.7	4.6	4.6	4.1	4.1	3.8	4.3	4.3	4.7	-12	+9
Tulsa, Okla.	10.2	10.1	10.1	9.7	9.0	9.3	9.2	8.5	8.5	9.4	+8	+11
Utica-Rome, N. Y.	3.3	3.6	3.6	3.0	2.4	2.4	2.5	2.4	3.1	3.1	+4	0
Washington, D. C.	44.4	44.4	43.1	40.2	37.7	38.1	39.1	40.2	42.0	42.2	-3	(6)
Waterbury, Conn. ³	2.4	2.3	2.3	2.2	1.9	1.8	1.8	1.9	2.4	2.2	-5	-8
Wheeling-Steubenville, W. Va.	4.9	5.1	5.2	5.1	4.4	4.8	5.1	4.2	4.4	4.7	+21	+7
Wichita, Kans.	8.4	8.2	7.8	7.2	6.7	6.7	7.1	7.6	8.0	8.1	-7	+1
Wilmington, Del.	17.2	16.1	15.1	13.9	11.4	10.5	10.8	14.5	10.3	16.0	-26	+55
Worcester, Mass.	4.8	5.1	5.1	4.3	3.9	3.8	4.0	3.7	4.3	4.4	+8	+2

Source: Department of Labor. ¹ Data from January 1956 not comparable with previous periods because area was redefined (and data correspondingly revised) to include not only Cobb, DeKalb, and Fulton Cos., but also Clayton Co. ² Not available. ³ Includes a small number of employees in mining. ⁴ Data from January 1955 not comparable with previous periods because area was redefined (and data correspondingly revised) to include not only Vanderburgh Co., Ind., but also Henderson Co., Ky. ⁵ Data revised from January 1955. Revised statistics for months not shown here are available upon request. ⁶ Change of less than one-half of 1 percent.

Table G-5: Contract Construction: Indexes of Aggregate Weekly Man-Hours

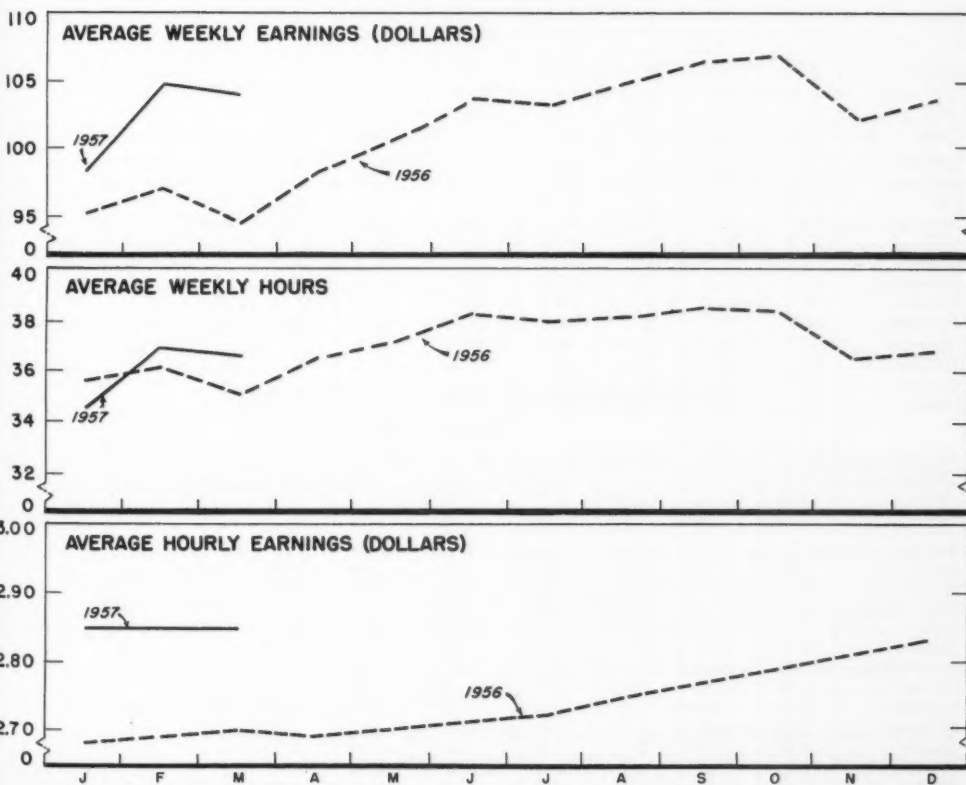
(1947-49=100)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1948.....	89.6	81.3	86.7	95.0	102.2	111.9	115.1	117.3	116.2	113.3	106.6	105.4	103.4
1949.....	94.2	88.9	89.2	95.0	103.1	106.8	110.5	114.2	111.5	111.4	104.4	94.9	102.0
1950.....	84.6	79.5	83.7	95.8	106.1	116.7	122.1	129.5	126.1	128.9	123.9	112.7	109.1
1951.....	106.4	99.3	105.4	116.9	126.4	131.8	137.7	141.1	138.5	139.8	124.2	121.6	124.1
1952.....	111.1	112.3	108.3	117.5	125.4	136.8	138.9	143.2	144.0	139.9	128.2	123.9	127.5
1953.....	109.1	108.7	109.1	115.8	122.6	130.4	132.0	137.2	131.7	136.7	126.7	117.2	123.1
1954.....	95.5	102.8	106.4	113.5	120.3	128.0	131.4	134.0	128.6	128.6	123.3	114.4	118.9
1955.....	101.4	98.6	108.4	115.5	129.3	136.5	144.1	145.1	148.5	140.8	128.2	124.3	126.7
1956.....	112.0	113.0	114.0	128.1	140.0	154.4	154.4	159.9	159.8	157.3	144.4	136.9	139.4
1957.....	113.6	121.7	124.9										

Source: Department of Labor.

Chart 15

Hours and Earnings of Workers In Contract Construction



SOURCE: DEPARTMENT OF LABOR

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CONSTRUCTION REVIEW

Table G-6: Contract Construction: Hours and Gross Earnings of Construction Workers

Period	All construction	Building construction							Nonbuilding construction		
		All building contractors	General contractors	Special trades contractors					All non-building	Highway and street	Other non-building
				All special trades	Plumbing and heating	Painting and decorating	Electrical work	Other trades			
AVERAGE WEEKLY EARNINGS											
Year: 1953.....	\$91.61	\$91.76	\$87.75	\$94.79	\$98.30	\$87.10	\$111.61	\$91.04	\$90.27	\$85.28	\$93.82
1954.....	93.98	94.12	89.41	97.38	102.71	90.39	112.71	93.19	92.86	86.88	97.34
1955.....	95.94	96.03	90.22	100.83	106.68	94.38	116.82	96.21	94.87	91.05	98.55
1956.....	101.65	101.92	95.04	107.16	112.31	99.81	125.22	102.03	101.59	97.39	104.54
1956: March.....	94.50	95.15	87.98	99.81	108.58	95.26	120.12	93.01	91.88	84.90	96.34
April.....	98.19	99.00	92.20	103.82	108.00	95.57	120.74	100.04	94.86	88.65	100.10
May.....	100.44	100.74	93.96	105.62	111.45	99.62	122.22	101.44	99.31	94.16	103.80
June.....	103.25	103.42	96.42	108.38	113.00	101.24	124.66	104.80	104.90	102.49	106.70
July.....	103.09	103.23	96.52	107.59	113.58	100.04	124.03	103.94	105.15	102.70	107.60
August.....	104.78	104.53	98.05	109.66	114.35	103.10	127.68	105.33	106.42	105.16	107.80
September.....	106.37	106.22	99.06	111.30	115.03	103.24	131.78	107.22	108.28	106.12	110.70
October.....	106.86	106.59	99.80	112.05	115.41	104.11	130.87	107.67	108.12	106.52	109.70
November.....	102.28	102.46	96.21	107.34	112.57	93.36	124.97	103.08	100.84	95.41	105.30
December.....	103.86	104.62	96.48	110.47	117.56	100.74	129.82	104.73	99.96	90.94	106.20
1957: January.....	98.33	98.94	89.76	105.49	115.67	97.28	127.65	95.93	94.86	83.90	101.70
February.....	104.88	105.70	98.55	110.35	117.27	99.57	130.75	104.25	101.24	93.09	106.50
March.....	104.03	105.12	96.29	111.02	116.89	102.31	133.45	104.25	101.12	92.00	107.00
AVERAGE WEEKLY HOURS											
Year: 1953.....	37.7	37.0	37.5	36.6	38.1	34.7	39.3	35.7	40.3	41.2	39.6
1954.....	37.0	36.2	36.2	36.2	37.9	34.5	38.6	35.3	40.2	40.6	39.9
1955.....	36.9	36.1	35.8	36.4	38.1	34.7	39.2	35.5	40.2	41.2	39.4
1956.....	37.1	36.4	36.0	36.7	38.2	34.9	39.5	35.8	40.8	41.8	39.9
1956: March.....	35.0	34.6	34.1	34.9	37.7	33.9	39.0	33.1	37.5	37.4	37.5
April.....	36.5	36.0	35.6	36.3	37.5	34.6	39.2	35.6	39.2	39.4	39.1
May.....	37.2	36.5	36.0	36.8	38.3	35.2	39.3	36.1	40.7	41.3	40.1
June.....	38.1	37.2	36.8	37.5	38.7	35.9	39.7	36.9	42.3	43.8	40.9
July.....	37.9	37.0	36.7	37.1	38.5	35.1	39.5	36.6	42.4	43.7	41.1
August.....	38.1	37.2	37.0	37.3	38.5	35.8	39.9	36.7	42.4	44.0	41.0
September.....	38.4	37.4	37.1	37.6	38.6	35.6	40.3	37.1	42.8	44.4	41.3
October.....	38.3	37.4	37.1	37.6	38.6	35.9	39.9	37.0	42.4	44.2	40.8
November.....	36.4	35.7	35.5	35.9	37.4	33.8	38.1	35.3	39.7	40.6	39.0
December.....	36.7	36.2	35.6	36.7	38.8	34.5	39.7	35.5	39.2	39.2	39.2
1957: January.....	34.5	34.0	33.0	34.7	37.8	33.2	38.8	32.3	37.2	36.8	37.4
February.....	36.8	36.2	36.1	36.3	38.2	34.1	39.5	35.1	39.7	40.3	39.3
March.....	36.5	36.0	35.4	36.4	38.2	34.8	39.6	35.1	39.5	40.0	39.2
AVERAGE HOURLY EARNINGS											
Year: 1953.....	\$2.43	\$2.48	\$2.34	\$2.59	\$2.58	\$2.51	\$2.84	\$2.55	\$2.24	\$2.07	\$2.37
1954.....	2.54	2.60	2.47	2.69	2.71	2.62	2.92	2.64	2.31	2.14	2.44
1955.....	2.60	2.66	2.52	2.77	2.80	2.72	2.98	2.71	2.36	2.21	2.50
1956.....	2.74	2.80	2.64	2.92	2.94	2.86	3.17	2.85	2.49	2.33	2.60
1956: March.....	2.70	2.75	2.58	2.86	2.88	2.81	3.08	2.81	2.45	2.27	2.57
April.....	2.69	2.75	2.59	2.86	2.88	2.82	3.08	2.81	2.42	2.25	2.54
May.....	2.70	2.76	2.61	2.87	2.91	2.83	3.11	2.81	2.44	2.28	2.59
June.....	2.71	2.78	2.62	2.89	2.92	2.82	3.14	2.84	2.48	2.34	2.60
July.....	2.72	2.79	2.63	2.90	2.95	2.85	3.14	2.84	2.48	2.35	2.60
August.....	2.75	2.81	2.65	2.94	2.97	2.88	3.20	2.87	2.51	2.39	2.60
September.....	2.77	2.84	2.67	2.96	2.98	2.90	3.27	2.89	2.53	2.39	2.60
October.....	2.79	2.85	2.69	2.98	2.99	2.90	3.28	2.91	2.55	2.41	2.60
November.....	2.81	2.87	2.71	2.99	3.01	2.91	3.28	2.92	2.54	2.35	2.70
December.....	2.83	2.89	2.71	3.01	3.03	2.92	3.27	2.95	2.55	2.32	2.71
1957: January.....	2.85	2.91	2.72	3.04	3.06	2.93	3.29	2.97	2.55	2.28	2.70
February.....	2.85	2.92	2.73	3.04	3.07	2.92	3.31	2.97	2.55	2.31	2.70
March.....	2.85	2.92	2.72	3.05	3.06	2.94	3.37	2.97	2.56	2.30	2.70
Percent change, March 1956 to 1957											
Avg. wkly. earnings ..	+10.1	+10.5	+9.4	+11.2	+7.7	+7.4	+11.1	+12.1	+10.1	+8.4	+11.0
Avg. wkly. hours.....	+ 4.3	+ 4.0	+3.8	+ 4.3	+1.3	+2.7	+ 1.5	+ 6.0	+ 5.3	+7.0	+ 4.5
Avg. hrly. earnings....	+ 5.6	+ 6.2	+5.4	+ 6.6	+6.3	+4.6	+ 9.4	+ 5.7	+ 4.5	+1.3	+ 6.2

Source: Department of Labor.

(NOTE: Table G-7, Registered Apprentices in the Building Trades, will appear on a semiannual basis, as data become available; table was last shown in the September 1956 issue.)

Construction Legislation

57

Amendment of Small Reclamation Projects Act of 1956. (Public Law 85-47, approved June 5, 1957.)

Public Law 85-47 amends section 4(c) of the Small Reclamation Projects Act of 1956 (P.L. 984, 84th Congress) to authorize the Secretary of the Interior to negotiate a contract with an applicant organization (a State or local public agency) without prior approval by Congress.

Initiation of the small projects program has been held in abeyance because the President, when he signed the original measure, objected to the provision of section 4(c) which required Congressional approval of proposed contracts before they could be executed by the Secretary of the Interior.

Under the amendment, however, no appropriation can be made for Federal financial participation until after a 60-calendar-day period (excluding periods of adjournment of either the Senate or House of Representatives) during which the Secretary's project proposals are subject to review by Senate and House Interior and Insular Affairs Committees. If either of the legislative committees disapproves a project proposal, appropriation of funds may be made only upon enactment of legislation specifically authorizing that project.

Department of Commerce and Related Agencies Appropriation Act, 1958. (Public Law 85-52, approved June 13, 1957.)

The following major construction items appear in this law:

Bureau of Public Roads. (1) \$1,690,000,000 for federally aided highway systems (in payment of obligations to the States made under various Federal-aid highway acts for fiscal years 1956 and 1957), to be transferred from the Highway Trust Fund under the Federal-Aid Highway Act of 1956; (2) \$25,000,000 for forest highways; and (3) \$12,000,000 for completion of survey and construction of the Inter-American Highway, in accordance with provisions of the Act of December 26, 1951, as amended.

Civil Aeronautics Administration. (1) \$124,603,525 for further expansion of the Federal airways system, including establishment and improvement of air navigation facilities, and site acquisition; and (2) \$25,000,000 to take care of airport-project contracts authorized under the Federal Airport Act, as amended by the Act of August 3, 1955.

Construction Regulations

VA Announced GI Home-Loan Entitlement May be Reinstated if Veteran Moves to Another City to Take a Better Job. (VA press release dated June 3, 1957.)

On June 3, 1957, the Veterans Administration announced that a veteran who disposes of his home in order to take a better job in a different city is entitled to have his GI home-loan eligibility reinstated, even though the job change was voluntary. Formerly, he could not obtain a new guaranteed loan unless the job change or transfer to another city was involuntary or beyond his control. The new ruling applies also to veterans moving to a different city following retirement.

Under this ruling, a "better job" is defined as one that will increase the veteran's income or provide him with greater opportunity for advancement.

Before a GI loan entitlement can be restored, the VA must be released from liability for the old loan. This generally is accomplished by payment of the loan in full, either by the veteran or the new purchaser.

Other circumstances under which a veteran may be entitled to a new GI loan eligibility are when the property (1) is taken by a governmental agency for public use; (2) is destroyed by natural hazard; or (3) is disposed of for certain compelling reasons, such as poor health, which are beyond control of the veteran.

EXPLANATORY NOTES

Construction Review brings together under one cover virtually all of the Government's current statistics that pertain to construction. Published jointly by the U. S. Department of Commerce and the U. S. Department of Labor, this monthly report is designed to serve the wide variety of groups and individuals among businessmen, government officials, legislators, labor unions, research workers, and the general public who need a convenient reference to the many facets by which current trends in construction may be gaged.

The various measures of construction are shown in detail wherever possible, by type of construction, trade, or material, and in addition, by location. The Index to statistical tables is a guide to the detail provided by each tabulation.

Most of the statistical series shown are prepared separately or jointly by the two agencies responsible for this publication. The remainder, specifically accredited, originate in other governmental agencies or are contributed by private organizations.¹

Almost all the statistics are presented on a monthly basis; the rest, quarterly. Except where noted, all data relate to the continental United States.

DEFINITION OF THE SERIES

Part A--Construction Put In Place. Construction, for the purpose of this series, is defined to include the engineering, design, and production of all fixed works and structures. Only new construction, including major additions and alterations, is covered; maintenance and repair work is excluded. The estimates cover build-

ings; other structures such as dams, levees, and bridges; and nonstructural works such as airfields, highways, canals, and navigation channels. They include the installed value of equipment generally considered an integral part of a structure and commonly included in the contract price, such as plumbing, heating, and air conditioning equipment and elevators. They exclude separable equipment, such as production machinery, power-generating equipment, and furnishings.

Clearing and development of land is included. If, however, an existing structure is demolished in the process, the demolition itself is excluded. Excluded also are oil, gas, and water well drilling; the digging and shoring of mines; and work which is an integral part of farming operations such as plowing, terracing, and the digging of drainage ditches.

Value of construction includes the cost of architectural and engineering fees, land development costs, material and equipment installed, labor, overhead, and profit on construction operations, but not speculative profits. Also included are the value of force-account work (construction done, not through a contractor, but directly by a business or government agency using a separate work force to perform nonmaintenance construction on the agency's own properties), as well as the value of work done by owners or their families on their own homes, farm buildings, and the like.

Estimates of the value of construction measure the value of work put in place on all structures and facilities under construction during a given period regardless of when work on each individual project was started.

¹ The private contributors are as follows: American Appraisal Co. (525 E. Michigan St., Milwaukee 2, Wis.), Associated General Contractors of America, Inc. (329 E St., N. W., Washington 4, D. C.), E. H. Boeckh and Associates (1406 M St., N. W., Washington 5, D. C.), and the Engineering News-Record (330 W. 42nd St., New York 36, N. Y.), which provide this bulletin with construction cost indexes; the F. W. Dodge Corporation (119 W. 40th St., New York, N. Y.), which provides contract award values for the 37 eastern States; and the following private associations whose materials production, shipments, and other statistics on materials are published here: American Institute of Steel Construction (101 Park Ave., New York 17, N. Y.), American Iron and Steel Institute (150 E. 42nd St., New York 17, N. Y.), Douglas Fir Plywood Association (Tacoma Bldg., Tacoma 2, Wash.), National Electric Manufacturers Association (155 E. 44th St., New York 17, N. Y.), National Lumber Manufacturers Association (1319 18th St., N. W., Washington 6, D. C.), and National Wood Work Manufacturers Association (332 S. Michigan Avenue, Chicago 4, Ill.).

Federally owned construction covers all projects financed exclusively with Federal funds, whether the work is done by force-account or by private contractors. State and locally owned construction, which also covers both force-account and private-contract work, includes projects financed entirely by State and local governments, as well as projects financed in part by the Federal Government under grants-in-aid programs. Thus, the value figures for State and locally owned construction include the funds obtained from all three levels of government--Federal, State, and local. For the most part, the types of projects involving both Federal and State or local government monies are highways, airfields, schools, hospitals, and sewage-disposal and water-supply facilities.

Part B--Housing. The housing series in this report cover only permanent and housekeeping dwelling units, which are defined as dwelling places containing permanent cooking facilities, or the minimum built-in facilities essential to housekeeping.

The series on the number of new permanent nonfarm dwelling units started, widely known as housing starts, includes prefabricated housing (if permanent), but excludes conversions (which are not new dwelling units) and hotel, dormitory accommodations, and military barracks (none of which are housekeeping dwellings). Excluded also are all temporary dwelling units, such as trailers, sheds, and shacks, as well as all farm housing.

The housing starts estimates are based on local building permits issued (adjusted for canceled permits and for lag between permit issuance and start of construction) and public contracts awarded, plus a field count of units started in a sample of nonpermit-issuing places.

Construction is said to have started when excavation work for the basement or the foundation of the structure has commenced.

This series was revised beginning with data for January 1954. The new series presents statistics for the 4 broad Census regions (Northeast, North Central, South, and West) and for the metropolitan, as compared with the nonmet-

ropolitan segment of the country. Estimates by metropolitan-nonmetropolitan location have been carried back on a monthly basis through January 1953, and on an annual basis through 1950.

These geographic data replace the urban-rural classification used previously. Also, rental-type units in the new series are classified as 2-4 family and 5-or-more family structures, compared with the former classification of 2-family and 3-or-more family structures.

Construction cost data shown here represent the average of builders' estimates of the construction cost of all new private 1-family houses started nationally. The construction cost averages are affected by variations in size and design of the houses, in the size and type of projects started, and differences in construction methods, as well as changes in cost of materials and labor. They do not represent the construction cost of a typical house, and should not be confused with selling price or permit valuation.

The cost data are based primarily on builders' estimates of construction cost as shown on the building permit, and on reports of construction cost by individual construction contractors in a representative group of localities not issuing permits. Building-permit information is adjusted for the general understatement of costs shown on permit applications.

The construction cost figures cover the cost of labor, materials, and subcontracted work, and that part of the builders' overhead and profit chargeable directly to the building of the houses. Included are the costs of equipment which becomes an integral part of the structure and is essential to its general use. Excluded are the costs of land, site improvement, architectural and engineering fees, and sales profits.

While the series on total nonfarm dwelling units started, as well as the series on units started under FHA and VA programs, cover new housing only, as distinguished from converted or existing housing, the statistics on nonfarm mortgage recordings of \$20,000 or less refer to both new and existing structures. Furthermore, the latter series covers all types of building construction, but resi-

dential building accounts for the larger proportion of these mortgage recordings.

Part C--Building Permits. The statistics on building construction authorized by local building permits, beginning with data for January 1954, measure building activity in all localities having building-permit systems--rural nonfarm as well as urban. Such localities (over 7,000) include about 80 percent of the total non-farm population of the country, according to the 1950 Census.

The building-construction data cover federally as well as nonfederally owned projects. Figures on the amount of construction contracts awarded for Federal projects and for public housing (Federal, State, and local) in permit-issuing places are added to the valuation data (estimated cost entered by builders on building-permit applications) for privately owned projects; construction undertaken by State and local governments is reported by local officials.

No adjustment has been made in the building-permit data to reflect the fact that permit valuations generally understate the actual cost of construction, nor for lapsed permits or the lag between permit issuance or contract-award dates and start of construction. Therefore, they should not be considered as representing the volume of building construction started.

Statistics shown in this report for the total metropolitan area of the country represent the 168 Standard Metropolitan Areas used in the 1950 Census. Data for individual metropolitan areas (which were selected from those for which building-permit coverage is complete or virtually complete) include an estimate for non-permit-issuing places in each area.

Permit valuation figures do not include the costs of (1) demolishing or moving buildings, (2) nonbuilding construction (e.g., streets and highways, pipelines, water and sewer systems, etc.), or (3) land, land development, and architectural and engineering fees.

The builders' estimates of cost as reported on the building permit, basically include the value of labor and materials involved. However, because of differences in requirements, administration,

and enforcement among the many local permit systems covered in this series, and variations in how individuals report, precise information is lacking regarding the extent to which the cost of service facilities essential to the general use of the building, or builders' overhead and profit, are included.

Dwelling units are defined the same for the building-permit series as for the series presented in Part II (New Housing) of this report. The nonhousekeeping residential building shown here is comprised of such structures as hotels, dormitories, tourist cabins, and clubs and association buildings with bedrooms.

Part D--Contracts. The value of contracts awarded represents the amount of the construction contracts let during a given period of time for new construction, including major additions and alterations. Maintenance and repair work is not covered. As in the "construction put in place" series, equipment which becomes an integral part of structures and is essential to their general use is included, as well as costs of land development, materials, labor, and contractors' overhead and profit on construction operations. Similarly, the value of Federal force-account work is also included, but the cost of land and separable equipment are excluded. However, unlike the construction put in place series, the statistics on contracts awarded exclude architectural and engineering fees and non-Federal force-account work, but include a small amount of demolition work when it is part of the overall contract for new construction.

Figures on federally owned projects are compiled from notifications of construction contracts awarded, obtained from other Federal agencies. Data on non-Federal construction are obtained from records compiled by the F. W. Dodge Corporation, for the 37 States east of the Rocky Mountains. For the remaining States, they are based on reports from local building-permit officials, augmented by reports on construction contract awards which appear in a number of construction trade periodicals. Inquiries about the Dodge contract-award series may be addressed directly to that company.

Part E--Costs. The Department of Commerce composite construction cost index is a combination of various cost indexes (prepared by private organizations and other government agencies), weighted monthly by the current relative importance of the major classes of construction shown in the series on construction put in place. It is, therefore, the equivalent of a variable weighted indicator, reflecting monthly changes not only in the component indexes, but also in the relative importance of the major classes of construction which are used as weights.

The individual private indexes reported monthly by the American Appraisal Company, Associated General Contractors, E. H. Boeckh and Associates, and the Engineering News-Record are computed from quotations for a designated bill of materials and a specified amount of labor. The indexes differ as to the amounts and kinds of materials and labor measured, geographic coverage, and the extent to which adjustments are made for variations in labor efficiency, overhead and other factors affecting construction costs.

Cost indexes applicable to particular locations and special types of construction may be obtained from most of these compilers.

All materials usually incorporated into buildings by the general contractor, or his subcontractors, are covered in the index of wholesale prices of building materials. Specifically excluded are consumer durable goods such as kitchen ranges, refrigerators, and air-conditioning equipment. Goods of constant quality are priced from period to period, so that the index measures the effect only of price, rather than of quality change. "Wholesale" refers to sales in large lots, at primary market levels.

The series was revised, beginning with the January 1952 index, to include the pricing of additional materials, a different weighting pattern, and a change in the pricing period. The revised index, based on 1947-49=100, is the "official" wholesale price index of the Federal Government for January 1952 and all subsequent months; the indexes previously published on the base 1926=100 are the official price indexes for Decem-

ber 1951 and all earlier dates. The index presented here for the year 1951 on a 1947-49=100 base is taken from a "linked" series, calculated solely for analytical purposes, and does not supersede the former index (1926=100) as the official series for that year.

Union wage scales are the minimum wage rates agreed upon through collective bargaining between employers and trade unions. Overtime beyond the negotiated maximum daily and weekly hours is excluded. In addition, the scales do not reflect either rates for apprentices or premium rates paid for special qualifications or other reasons.

Part F--Materials Output. The Indexes of Construction Materials Output provide measures of production or shipments for ten groups of construction materials, and are based on the output of 43 selected materials. Monthly indexes are provided for eight groups of materials, quarterly indexes for the other two groups, and annual levels are given for all groups.

In computing the indexes, the current monthly or quarterly unit production or shipments data are converted to aggregate values by multiplying 1947-49 average prices at the mills, factories, or plants. The base period aggregate values (1947-49 monthly average = 100) are derived by multiplying 1947-49 monthly average output by the 1947 average factory, mill, or plant price. By the use of varying physical quantities, and constant prices, the group indexes represent physical quantity measures. The trend lines appearing on the charts are derived from the group indexes by removing the month-to-month fluctuations resulting from seasonal and erratic factors. The lines are 12-month moving averages centered on the seventh month, with each calendar year centered on July. Projections for the last 6 months are made by using the current data adjusted for the seasonal movements appearing during the period 1952-54, and smoothed by a 3-month moving average.

Part G--Employment. Data on employment in contract construction cover all employees of construction firms who worked during, or received pay for, the payroll period ending nearest the 15th of the month, regardless of the type of

work performed. Only firms engaged in the construction business on a contract basis for others are included, but such firms pursue all kinds of construction activities--new work, alterations, demolitions, maintenance, and repairs. Excluded are self-employed construction workers, working proprietors, and force-account employees of non-construction firms and public agencies engaged in construction activities.

The hours and earnings estimates relate only to nonsupervisory construction workers and working foremen. All such workers, regardless of skill, are included if they are engaged in any way in contract construction activities (on either privately or publicly owned projects).

The earnings statistics shown are gross earnings before deductions for old-age and unemployment insurance, withholding tax, bonds, and union dues. Gross earnings include the workers' base pay, premium pay for overtime and for bonuses, and pay for sick leave, holidays, and vacations taken, but such items as employer contributions to welfare funds, and to insurance or pension plans, are excluded.

The indexes of weekly man-hours in contract construction are a composite measure of the trends in construction-worker employment and average weekly hours. They provide a more meaningful measure of contract-construction activity than the employment or average weekly hours series alone, since the volume of work done is dependent upon both the number of workers employed and the length of their workweek.

The foregoing employment and earnings series are based upon reports from individual contracting establishments; these reports do not contain the detail necessary to separate employment according to the kind of construction work performed.

Information shown in this report on apprentices in the building trades applies only to registered apprentices. A registered apprentice is defined as an employee who, under an expressed or implied agreement for a stipulated term, receives instruction in a registered ap-

prenticeship system, and concerning whom a recognized apprenticeship agency has on record all the information it requires.

The apprenticeship data are obtained from local apprenticeship committees, trade unions, employers' associations, and building trades councils, by field representatives of the Federal Government and cooperating State Apprenticeship Agencies. Occupational classifications are based on descriptions in the Dictionary of Occupational Titles (Washington, U. S. Employment Service, 2d Ed., 1949). For the purposes of the tabulation presented here, three classifications--brick, stone, and tile workers; cement masons; and plasterers--have been combined into one group, the trowel trades.

SELECTED REFERENCES

Descriptions of the techniques of compiling most of the series included in Construction Review, as well as related explanatory information and historical statistics, are contained in a selected group of Government publications shown on the following page.

Starred (*) items may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at the prices shown. Other publications listed here are available upon request to the agency responsible for the specific report.

SELECTED REFERENCES

***Business Statistics: A Supplement to the Survey of Current Business.** 1955 Biennial Edition. U. S. Department of Commerce, Office of Business Economics. \$2.

***Construction Volume and Costs, 1915-54.** May be obtained from Bureau of Labor Statistics Regional Offices or Department of Commerce Field Offices (see inside front cover of Construction Review for addresses), or from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 50 cents.

Construction Cost Indexes. BLS Report No. 73, November 1954. U. S. Department of Labor, Bureau of Labor Statistics, Washington 25, D. C.

***Construction During Five Decades, Historical Statistics, 1915-52.** BLS Bulletin 1146. U. S. Department of Labor, Bureau of Labor Statistics. 45 cents.

***Employment and Earnings.** Monthly. U. S. Department of Labor, Bureau of Labor Statistics. Subscription price: \$3.50 domestic; \$4.50 foreign. Single copies vary in price.

***Employment and Earnings.** Annual Supplement Issue. June 1957, U. S. Department of Labor, Bureau of Labor Statistics, Washington 25, D. C. \$1

***Ninth Annual Report--Housing and Home Finance Agency.** Calendar Year 1955. Housing and Home Finance Agency. \$1.50.

Housing Statistics. Monthly. Housing and Home Finance Agency, Division of Housing Research, Washington 25, D. C.

New Construction Expenditures, 1915-51: Labor Requirements 1939-51. U. S. Department of Labor, Bureau of Labor Statistics, Division of Construction Statistics, Washington 25, D. C.

***Techniques of Preparing Major BLS Statistical Series.** BLS Bulletin 1168, U. S. Department of Labor, Bureau of Labor Statistics. 60 cents.

Chapter II --Estimating National Housing Volume

Chapter III --Estimating Expenditures for New Construction

Chapter IV --Labor Required for New Construction

Chapter VI --Measurement of Industrial Employment

Chapter VII--Hours and Earnings in Nonagricultural Industries

Chapter X --Wholesale Price Index

Chapter XII--Studies of Occupational Wages and Supplementary Benefits

***Union Wages and Hours: Building Trades, July 1, 1956.** BLS Bulletin 1205. U. S. Department of Labor, Bureau of Labor Statistics. 35 cents.

Revised Wholesale Price Index of Building Materials, in Construction, March 1952, pp. 3-8. U. S. Department of Labor, Bureau of Labor Statistics, Division of Construction Statistics, Washington 25, D. C.

A Description of the Revised Wholesale Price Index. Serial No. R 2067. Monthly Labor Review, Feb. 1952. U. S. Department of Labor, Bureau of Labor Statistics, Washington 25, D. C.

***Wholesale Prices, 1951 and 1952.** BLS Bulletin 1143. U. S. Department of Labor, Bureau of Labor Statistics. 30 cents.

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

2. The second part of the paper is devoted to a detailed analysis of the properties of the solution of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the solution is a function of the parameters α and β and is continuous with respect to these parameters. It is also shown that the solution is a function of the parameters α and β and is continuous with respect to these parameters.

